CURRENT History A MONTHLY MAGAZINE OF WORLD AFFAIRS

AUGUST 1964

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CURRENT History

FOUNDED IN 1914 BY
The New York Times
PUBLISHED BY
Current History, Inc.
EDITOR, 1943-1955:
D. G. Redmond

AUGUST, 1964 VOLUME 47 NUMBER 276

Publisher:
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Published monthly by Current History, Inc., Publication Office, 1822 Ludlow St., Phila. 3, Pa. Editorial Office, 156 Wolfpit Ave., Norwalk, Conn. Second Class Postage paid at Phila., Pa., and additional mailing office. Indexed in The Readers' Guide to Periodical Literature. Individual copies may be secured by writing to the publication office. No responsibility is assumed for the return of unsolicited manuscripts. Copyright, © 1964, by Current History, Inc.

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NO ADVERTISING

AUGUST, 1964

VOL. 47, NO. 276

In this issue, eight articles explore United States views on weapons control and disarmament and alternative paths toward peace and military security. Our introductory article, discussing United States contributions to the science of weaponry, points out that "we seem to have been noted from the very beginning of our history for an inventive genius and a sort of crafty, make-do resourcefulness..."

Weapons Development in the United States

By Ross N. Berkes
Director, School of International Relations,
University of Southern California

HAT IS A WEAPON? Our problem is not the issue of definition—an instrument of any kind used for fighting—but the issue of identification: is a tank a weapon, or is it a weapons carrier; or, what is (should we now say "was"?) a battleship? Both the airplane and the tank, and probably the battleship as well, were once viewed by competent military authority as artillery—extending the range of the gun, so to speak. Perhaps we should still classify them in such a manner.

But then is a naval blockade a weapon? And how should one classify propaganda? It may seem sterile and academic to worry at such issues, and yet, while we will settle for calling them all weapons, one of the critical problems in the development of modern warfare has derived from repeated instances of

obtuseness—or at least slowness—in visualizing something more imaginatively as a carrier that began its military service as a mere weapon. As the British military historian, General J. F. C. Fuller, noted, had World War I gone on another year, it would have been clear, he thought, "that tanks and aircraft were not weapons, but instead vehicles." Fuller went on to remark:

Further, that as their dominant characteristics were new means of movement, rendered practical by the common prime mover, petroleum, entirely new fighting organizations could be built around them—namely, self-propelled armored armies and airborne armies, and not merely self-propelled armored guns and airborne artillery.¹

In the broadest sense of weaponry, then, the United States entered the twentieth century with a long and often surprising list of contributions to the world of military tactics and technology. But except for the writings

¹ J. F. C. Fuller, Armament and History (New York: Scribner's, 1945), p. 143.

of Admiral Alfred Thayer Mahan—freshly in mind at the fin de siècle war colleges—we had made little or no contribution to the world of military strategy. Nor has the twentieth century, so far as it has gone, shown any signs of redressing the tremendous disbalance in favor of our tactical and technological skills at the expense of our strategic understanding. Except for Mahan, strategic grasp vis-à-vis the Western Pacific was almost totally nonexistent during and after the Spanish-American War, during and after World War I, and even during and after the Washington Disarmament Conference of 1921-1922. permitted the remnants of Spanish rule in the Pacific to be picked up first by Germany and then by Japan, and then ensured a prime Japanese advantage by our Washington Conference agreement restricting fortifications in the area. Such evidences of default were matched by even more impressive evidence of a nationwide insensitivity to the strategic utilities of our growing Asian interests.

To take another illustration of the strategic vacuum, our enormous naval building program, begun in 1916 as a wartime measure, was continued in 1919, much to the agony and alarm of both Britain and Japan, but more as a diplomatic lever than as a serious measure taken in consideration of strategic requirements in the postwar world.

To return briefly to American contributions to tactics and technology prior to World War I, we seem to have been noted from the very beginning of our history for an inventive genius and a sort of crafty, make-do resource-fulness—a combination of talents that the frontier nature of our society surely helped to bring to the fore. Referring back to colonial and Revolutionary War times, Edward Mead Earle paid tribute to our development of camouflage and taking cover, adding that we "raised to a fine art the practice of impeding the enemy's advance by felling trees, weakening bridges, and otherwise 'scorching the

earth." Professor Earle went on to note that the tactics of our Civil War "were for generations the object of careful study by European staffs: the movement of troops by rail, mining and sapping, trench warfare, and aerial observation, among other things." General Fuller extends the evidence of our Civil War inventiveness, noting that this was where the rifled gun was developed, and where the magazine-loading rifle and the machine gun were invented. Moreover, it was during this period that we first experimented with torpedoes, land and submarine mines, wire entanglements, hand grenades, rockets, and booby traps.³

Despite all of our innovations, General Helmuth von Moltke, Prussia's great tactician and disciple of Clausewitz, is reported to have seen nothing in our Civil War but "two armed mobs chasing each other around the country, from which nothing could be learned."

WAR AND MASS PRODUCTION

Nonetheless, we brought a special and rather unique contribution to warfare: the adaptation of mass production to war. A rather alarming point of comparison emphasized this point, if somewhat left-handedly, in a passage by Hanson Baldwin—one dealing with American soldiers in World War II:

Enemy intelligence reports and our own secret training documents [he noted] repeatedly emphasized the lack of esprit de corps in the American infantry; the enemy was as little impressed with the spirit of our fighting man power as he was much impressed with our mass of equipment.⁴

Whatever the deficiencies in our esprit de corps, and it is fervently to be hoped that they were overstated, we have contributed to warfare an overpowering range of technological competence. More than any other people, including the Germans, we mechanized warfare, committed it almost irretrievably to the machine, and thus made it increasingly a weapon itself of the rich, the educated and the scientific. In a sense, many of the present-day Communist initiatives in warfare are attempts to return war to a sub-technological plane, where they hope to compete against us with greater chances of success.

² Edward Mead Earle, Makers of Modern Strategy (Princeton: Princeton University Press, 1943), p. ix.

³ Fuller, op. cit., p. 116. ⁴ Hanson Baldwin, The Price of Power (New York: Harper's, 1947), p. 134.

Prior to World War I, the weapons system most basic to our outlook and position in world affairs was the naval fleet. And for most of our history, right up to the beginning of the twentieth century, we viewed sea power with such an unimaginative perspective as to regard its main utility to be as an adjunct to land power. Or, as the Sprouts once phrased it:

For nearly a century the framers of American naval policy had proceeded on the assumption that commerce and passive coast defense were the Navy's two basic functions in war.⁵

The concept of naval warfare as merely a branch of land warfare, typical of French as well as American thought during the nineteenth century, is paralleled by a similar German error in the early years of World War II, where air power, as well, was regarded as a mere appendage of land power. Strategic bombing was tacked onto air warfare as a conceptual scheme largely through innovative British and American practices although important segments of their air power remained cooped up in Britain prior to June, 1944. Had Germany understood the potentialities of strategic bombing in time to concentrate more heavily on building a greater bomber command, the Battle of Britain might very well have turned out differently. The lesson here, as well as the one with reference to sea power, must be that it is exceedingly difficult to visualize at the outset the ultimate role of any great weapon or weapons system. Certainly this was no less true of the tank than it was of either air power or sea power in the original conceptual grasp of most military establishments—as French General Charles de Gaulle has most bitterly noted, before, during and after World War II.

One of the more educational facets in the history of modern warfare relates to the dethronement of weapons and weapons systems in the deadly competition for ascendancy. The up-again, down-again role of artillery—a weapon that has been so dependent upon rescuing innovations such as rifling, smokeless powder, shock absorbers, and range finders—

illustrates the delicate balance distinguishing success from failure. The demise of cavalry did not await the arrival of mechanized mobility; but can almost be said to have happened in an afternoon at Sedan in 1870. The machine gun and the concept of the continuous front turned warfare into the frozen, ghastly deadlocks of World War I, depriving it of the dash, mobility, and flanking maneuvers that the occasional ascendancy of offense over defense had been able to romanticize—an ascendancy once again restored in World War II by more imaginative use of both tanks and planes. Nor was naval power after 1860 any more free of the upsetting consequences of invention and innovation. It took something like 30 years, but, by 1890, a new sea power had replaced sails, wooden hulls and smooth-bore guns-in short, everything important about a man-o'-war, including how to fight one in actual combat.

Thanks largely to the professional influence of Mahan and the political influence of Theodore Roosevelt, a concept of an independent, top-ranking, and far-ranging sea power lifted the United States into a sustained twentieth century emphasis on the importance of offensively-geared naval strength. This was sustained at least until World War II when the invention of new weapons began to threaten some of the cherished and hallowed doctrine. Naval ascendancy in American military thought and congressional appropriations, a product of Mahan's strategic analysis of our expanding influence and interest overseas, harmonized most curiously with our persisting isolationism. As the argument went, because we had a big navy, we did not need a large army; furthermore, to build a large army might tempt us to commitment in foreign lands beyond the periphery of our national interest, for there was little or no threat in this hemisphere that a navy could not handle. It was only dimly or occasionally perceived that we could get away with this largely as a by-product of British naval doctrine and supremacy rather than our own. Still it did not matter; the protective shield of command of the seas was the touchstone of our strategic and tactical perspective.

⁵ Harold and Margaret Sprout, Toward a New Order of Sea Power (Princeton: Princeton University Press, 1940), p. 7.

AIR POWER ASCENDANT

But all of this ended. A gradual, symptomatic decline in naval power began soon after the end of World War I, just at the peak of a new wave of naval ascendancy. Just as the United States Navy began to surpass in size and power all other postwar fleets, a fledgling air arm sunk a former German battleship, the Ostriesland, in a test off the Virginia Capes in July, 1921. As Edward Warner describes it, the test gave "the first actual demonstration that gravity-propelled bombs could send a heavily armored vessel to the bottom." Hardly less meaningful was Warner's subsequent remark: "Thereafter the prevailing tense of air power's claim to supremacy changed from the future to the present."6

So long as portable or "shootable" explosives remained within the comparatively finite limits of the kiloton, and range was not truly intercontinental, the voluble little group of air supremacists were guilty more often than not of overbidding their hand. Their greatest prophets were General Giulio Douhet of Italy and General "Billy" Mitchell of the United States, both of whom saw command of the air as the decisive issue in any future great To their credit, both understood air power as a vehicle of strategic bombing-if mainly, and probably quite erroneously, as a means of breaking civilian morale. Mitchell was particularly graphic. Writing in 1930 of a possible enemy attack on the major cities of the United States, he argued that:

It is unnecessary that these cities be destroyed, in the sense that every house be levelled to the ground. It will be sufficient to have the civilian population driven out so that they cannot carry on their usual vocations. A few gas bombs will do that.⁷

However mistaken Mitchell may have been in this passage, it was a model of caution compared to some of his utterances four or five years earlier. In 1925, he had been willing to proclaim in his book, Winged Defense, that "In future the mere threat of bombing a town by an air force will cause it to be evacuated, and all work in factories to be stopped."8 Perhaps it is worth noting here that this was the period of the mid-1920's, when the popular movement to outlaw war was reaching full stride, driven in part at least by scare-images of the air supremacists and those of the poison gas alarmists. In the vanguard of the latter, and not far behind in the former, was one of the last of a disappearing breed, the great, moving orator, Colonel Raymond Robins. Turning from oral to written rhetoric, Colonel Robins characteristically described the "menace of the next war" in the following passage:

We do not half appreciate the menace of the next war. For the first time in human history, the scientific mind, the trained intelligence of the chemist and the engineer have been devoted to the development of the most effective means for wholesale slaughter. Each nation is being equipped with invisible and odorless poison gas that is instantaneously deadly; with fleets of bombing airplanes controlled by wireless. We are now able to destroy whole populations in a night. . . . War has become national and international suicide. 9

The dramatic use of the bomber during the later stages of World War II, particularly the destruction of German cities by the abandonment of precision bombing in favor of area bombing, evoked a sad footnote from the French analyst, Raymond Aron, to the effect that "blind destruction had entered into the habit of combat." Combining this development with the awesome advent of nuclear warheads, our conception of military power at the outset of the post-World War II period was almost exclusively that of nuclear-armed bombing planes.

Whether there could ever be enough runway on a naval carrier to dispatch a plane carrying a nuclear bomb, or whether such a strategic mission would be permitted the Navy over the Air Force's almost certain jurisdictional challenge, was a moot point.

⁶ Edward Warner, "Douhet, Mitchell, Seversky: Theories of Air Warfare," found in Earle, op. cit., p. 485.

⁷ *Ibid.*, p. 498.

⁸ Cited by Warner in Earle, op. cit., p. 498.

⁹ Col. Raymond Robins, "The Outlawry of War—the Next Step in Civilization," Annals of the American Academy of Political and Social Science, July, 1925, p. 153.

¹⁰ Raymond Aron, The Century of Total War (Garden City: Doubleday, 1954), p. 39.

In any event the Navy had little confidence in its own future during the first few years after the war. Under the banner headline of "Changing Concept of Sea Power's Role in Atomic-Age Warfare," a popular magazine article early in 1947 reflected naval thinking as almost exclusively diverted to beneath-thesurface, super-submarine activities. And after several dramatic ups and downs in the next 12 years, wearing the battle scars of severe quarrels over Navy carriers versus Air Force long-range bombers, the Navy was still most uncertain as to its eventual role in nuclear-age warfare. A survey of the Navy's predicament made in 1959 finally concluded with the observation that:

... for all its preoccupations with the new under-water technologies (ASW-antisub-warfare), the Navy refuses to believe that it is destined to evolve simply into a creature of the ocean deep. As Admiral Burke has chosen to read the future, "We ... feel it our duty to stay largely on top."11

It is fully relevant to the study of weapons development to note the outbreaks of interservice quarreling that have marred the scene since the end of World War II. Most of the quarrels have been jurisdictional, with claims and counter-claims as to the rights of one or another in the development of a new weapon or weapons system. The scope of naval air operations, for instance, has been a matter of bitter contest for almost the entire postwar period, despite the fact that Secretary of Defense James Forrestal thought he had resolved the issue by a sentence in the Key West interservice agreements of 1948. All he managed to win, however, had been the Air Force's agreement that the Navy had a primary function "to conduct air operations as necessary for the accomplishment of objectives in a naval campaign." This did not entitle the Navy to develop a carrier-based bomber force rivaling the Strategic Air Command, and still begged the question as to where to draw the

Much of the inter-service in-fighting was

the product of the Air Force's peculiar hold on Congress, and of the politically urgent importance of trimming the federal budget without tampering with Air Force appropriations, regarded as so vital to our national defense. Since something had to give, it was ultimately the breaking of the 1-1-1 ratio in appropriating money for the three services. This balance, which had been a politician's type of comforting compromise, had been sustained throughout the early congressional-backed demands for a 70-group Air Force. The Finletter Report (the analysis and recommendations from the President's 1948 Air Policy Commission) had been so influenced by the 70-group Air Force argument that it could hardly bring itself to acknowledge the existence, let alone the problems, of the other two services.

Having its demands shunted aside by Secretary of Defense Forrestal, Joint Chiefs of Staff Chairman General Omar Bradley, and President Harry Truman, the Air Force (bulwarked by the Finletter Report) went into open challenge and found the sympathy it wanted in Congress. By mid-1949, otherwise cool-headed, more balanced military analysts, such as Hanson Baldwin, were becoming alarmed. As Baldwin wrote at the time:

The easy-war, one-weapon theorists with their strategical dependence upon the atomic bomb and the long-range strategic bomber, have sold a bill of goods to Congress and the public that has caused us to put an overdependence upon the bomb and to guard it with almost panicky secrecy.¹²

The final breaking of the 1-1-1 ratio came with the "New Look" in 1954-1955, and by 1956-1957 found the Air Force budget at \$16.5 billion, as against the combined Army and Navy budgets of \$18.2 billion. Two things occurred in 1954 to set up this disbalance: first, the announcement by Secretary of State John F. Dulles of the adoption of a new defense strategy called "massive retaliation," and second, the beginning of the effort, in a seeming race against time, to construct an Intercontinental Ballistic Missile. The financial and military burdens of both were almost exclusively assigned to the Air Force. Meanwhile, the Air Force was placed in the

¹¹ Charles J. V. Murphy, "U.S. Sea Power: "The New Mix," Fortune, August, 1959, p. 187.

¹² The New York Times, May 29, 1949.

increasingly awkward position of apparent conflict of interest between its desire to extend the life of the manned bomber and its interest in supplanting the manned bomber by an ICBM weapons system at the earliest possible time.

The manned bomber-ICBM quarrel that emerged gained just about the same partisans as the 70-group Air Force conflict of a decade before. The demand for a powerful interim force of B-52's, and, possibly, even a newer version of the supersonic intercontinental bomber, found the Air Force once again isolated in the Pentagon and rebutted in the White House. President John Kennedy, in a message to Congress in early 1961, mentioned the impasse with an admirable mixture of charm and stubbornness when he said:

The considerably more rapid growth projected for our ballistic missile force does not eliminate the need for manned bombers—although no funds were included in the January budget for the further procurement of B-52 heavy bombers and B-58 medium bombers, and I do not propose any. Our existing bomber forces constitute our chief hope for deterring attack during this period prior to the completion of our missile expansion.¹³

But, as in the older quarrel, so again here, the Air Force found considerable sympathy and backing in Congress, enough to pass an added appropriation—over the head of the Executive—of \$514 million to buy additional B-52 bombers, a sum which the President and Secretary of Defense Robert S. McNamara merely refused to use.

The doctrine of massive retaliation, in so far as we are concerned with it here, required us to have available or to develop a capacity to respond vigorously at places and with means of our own choosing. One can better understand the true meaning of this doctrine by noting what kinds of situations it was designed to avoid and what were our actual sanctions for insuring success. Although we were not committed to it, we were substanti-

ally threatening atomic war, directed at the heartland of the Soviet Union.

The thrust of the massive retaliation announcement, at least in reference to our own strategic posture, was further to increase the disbalance between atomic air power and the rest of our military systems and capabilities.

Several things happened, however, to redress the balance and to turn our military profile away from the severe, bleak lines of an air-ICBM-atomic preoccupation. the development of a rival air-ICBM-atomic competence on the part of the Soviet Union, which encouraged the long-suffering United States Army to suggest that the United States was now faced with a completely new strategic situation. Expounding a mutual deterrence theory, Army leaders like Lieutenant General James M. Gavin and General Maxwell D. Taylor began to argue that a nuclear stalemate had come into being, and that the consequent prohibition on the employment of nuclear weapons-at least against cities and industries-meant that the balance of battle must swing back to ground forces armed with tactical nuclear weapons.14

Something else of relevance also occurred around the same 1955–1956 period, and that was the Navy's development of a solid fuel propellant for missiles. Getting away from dangerously volatile liquid propellants put the Navy into the missile business, particularly when underwater launching became a feasible operation. And while the Navy continued to place a great, now renewed, faith in the carrier, the Polaris-armed submarines became the Navy's great equalizers in the historic struggle

(Continued on page 113)

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¹³ 87th Congress, 2d Session, House Document No. 502, *United States Defense Policies in 1961*, p. 23.

¹⁴ Charles J. V. Murphy, "Eisenhower's Most Critical Defense Budget," Fortune, December, 1956, p. 112.

"Perhaps the most significant aspect of United States policy as it has evolved since 1961," writes this analyst, "has been the development of our forces and strategy on the basis of a second-strike concept." The Administration believes that, if general war should occur, it is still worthwhile to try to induce the enemy "to follow our suit in limiting damage to civilian populations..."

United States Military Posture Today

By ALVIN J. COTTRELL
Staff Member, Institute for Defense Analyses

States-Soviet rivalry in recent years has been the question of military superiority.¹ Complicating the question is the fact that one of the two major rivals, namely the Soviet Union, has consistently wrapped itself in a shroud of secrecy perhaps unparalleled in history.

President John F. Kennedy, it will be recalled, made the alleged "missile gap" favoring the Soviet Union a key issue in his campaign for election in the fall of 1960. After assuming office in January, 1961, the Administration was soon forced to admit that there had been no "missile gap" at all.² Indeed, it now seems clear that the United States, instead of being in a position of inferiority at that time, actually enjoyed a clear-cut superiority, at least in nuclear-strategic delivery

capacity, and continues to enjoy that superiority today.

The difficulty that the critics of the Eisenhower administration faced was due in no small measure to the lack of knowledge which the commentator and analyst outside of the government had of actual Soviet missile development. The Eisenhower administration, by contrast, was able to estimate with considerable precision Soviet capabilities because it was in possession of highly scientific intelligence such as that collected by the U-2 flights. Kennedy administration officials explained later that their mistaken assessment had been due largely to the fact that they extrapolated on Soviet productive capacity rather than on Soviet strategic intentions. In short, they argued that the Soviets could have achieved long-range missile superiority if they had exercised the option available to them.

Much of the controversy over superiority has thus been due to the inherent difficulties involved in making any precise assessment. In assessing the relative military balance between such technological-military giants as the United States and the U. S. S. R. there are judgments which must be based on a degree of scientific knowledge possessed by relatively few individuals.

After recanting and moving beyond the "missile gap" controversy, the Kennedy administration went on to state clearly its belief in United States strategic-nuclear superiority. In a major address at Hot Springs, Virginia,

¹ The views expressed in this article are those of the author, and should not be interpreted as reflecting the official opinion of the Institute for Defense Analyses or of any department or agency of the U.S. government.

The author is deeply indebted to Mr. Harland Moulton of the Arms Control and Disarmament Agency for his assistance in the preparation of this article. Mr. Moulton was kind enough to make available to the author his very extensive research on this subject.

² See Jack Raymond, Power at the Pentagon, (New York: Harper & Row, 1964). The Pentagon correspondent of The New York Times writes: "When President Kennedy's Administration took over in 1961 it was conceded that no missile gap had developed. Samos reconnaissance satellites confirmed the indications received from the abandoned U-2 flights that it was the Russians who suffered from a missile gap" (p. 257).

on October 21, 1961, the then Deputy Secretary of Defense, Roswell Gilpatric, stated in the most blunt and candid terms the military superiority of the United States in strategic delivery capabilities. It seems worthwhile to quote his statement at length. He stated,

The fact is that this nation has a nuclear retaliatory force of such lethal power that an enemy move which brought it into play would be an act of self-destruction on his part. The United States has today hundreds of manned intercontinental bombers capable of reaching the Soviet Union, including 600 heavy bombers and many more medium bombers equally capable of intercontinental operations because of our highly developed in-flight refueling techniques and worldwide base structure. The United States also has six Polaris submarines at sea carrying a total of 96 missiles, and dozens of intercontinental ballistic missiles. Our carrier strike forces and land-based theater forces could deliver additional hundreds of megatons. The total number of our delivery vehicles, tactical as well as strategic, is in the tens of thousands; and of course we have more than one warhead for each vehicle.3

He went on to point out that a surprise attack "could not effectively disarm us" and, very significantly as far as our estimate of relative nuclear striking power vis-à-vis the Soviet Union is concerned, he said:

The destructive power which the United States could bring to bear even after a Soviet surprise attack upon our forces would be as great asperhaps greater than-the total undamaged force which the enemy can threaten to launch against the United States in a first strike.4

CAPABILITIES ESTIMATES

It now seems absolutely certain that United States, and other, analysts in the Western world during the late 1950's, official and unofficial, greatly overestimated Soviet strategic delivery capabilities, particularly their intercontinental delivery systems. They tended to credit the Soviets with a capability in ICBM's which they did not physically possess. Continental strategic delivery capabilities, however, are another matter. There can be little doubt

NATO," Orbis, Summer, 1962, p. 245.

that the force of intermediate-range missiles which the Soviets can target against our European allies is large, and Europeans are well aware of this fact.

THREAT TO EUROPE

Kai-Uwe von Hassell, Defense Minister of West Germany, has observed: "Nato, for instance, has not yet found an answer to the question of how the increasing threat to Europe posed by Soviet MRBM's can be countered."5 A leading member of the ruling Christian Democratic party in the Bundestag voiced a similar warning:

The fact that a real gap in the field of intercontinental missiles so far does not seem to exist is no reason for complacency. This is all the more true since the Soviets have gained a considerable lead over the United States in the field of mediumrange missiles, both quantitatively and qualitatively. This lead is a serious danger for European nations, making them-as Premier Khrushchev pointed out to some Western ambassadors-"hostages" of Soviet power. The closing of the medium-range missile gap is one of the most urgent requirements for strengthening NATO.6

The number of Soviet surface-to-surface missiles with ranges of 100 to 2,500 miles has been estimated to be in the hundreds. This family of missiles can reach all of Europe, and presents a threat to Europe which Nato cannot currently counter. But again, there can now be little doubt that the United States possesses a very substantial superiority over the Soviet Union in long-range delivery systems and that for some time this was not appreciated in Western circles.

Secretary of Defense Robert S. McNamara chose the occasion of an address to the Economic Club of New York on November 18, 1963, to make a very candid public estimate of the current United States-Soviet balance of military forces as seen by the Administration. He said:

Let me summarize the current status of the balance of strategic nuclear forces, that part of the military environment that has preoccupied our attention so long. In strictly relative numerical terms, the situation is the familiar one. The U. S. force now contains more than 500 operational long-range ballistic missiles-Atlas, Titan, Minuteman, Polaris-and is planned to increase to over 1,700 by 1966. . . . In addition, the

³ Speech before the Business Council, Hot Springs, Va., October 21, 1961, Department of Defense, Office of Public Affairs Release, No. 1173-61.

⁵ Kai-Uwe von Hassell, "Détente through Firmness," Foreign Affairs, April, 1964, p. 188.

⁶ Kurt Birrenbach, "The Reorganization of

United States has Strategic Air Command bombers on air alert and over 500 bombers on quick reaction ground alert.

The Secretary then assessed Soviet capabilities as follows:

By comparison, the consensus is that today the Soviets could place about half as many bombers over North America on a first strike. The Soviets are estimated to have today only a fraction as many intercontinental missiles as we do. Furthermore, their submarine-launched ballistic missiles are short range, and generally are not comparable to our Polaris force.7

While emphasizing United States superiority over the Soviets at the strategic level, Mc-Namara acknowledged the Soviet threat to our allies in Europe stating:

The Soviets pose a very large threat against Europe, including hundreds of intermediate and medium-range ballistic missiles. This threat is today and will continue to be covered by the clear superiority of our strategic forces.8

The Secretary concluded that he would not exchange strategic forces postures with the Soviet Union at any time over the next decade.

The Kennedy administration contended, and no doubt the successor Johnson administration holds the same view, that the Soviets are well aware of their inferior position at the strategic delivery level and hence are equally cognizant of the implications of becoming embroiled in conflicts with the United States in local or peripheral areas such as Western Europe and to a lesser extent the Middle East and Southeast Asia where they could perhaps field superior local strength but where such a move could escalate into general nuclear war.

Certainly the Soviet behavior in the confrontation over Cuba seemed to provide adequate support for this position. Indeed, whatever other motivations the Soviets may have had for placing intermediate-range missiles and bombers in Cuba, it seems clear that this attempt reflected, at least in part, Soviet

⁷ See The New York Times, November 19, 1963. 8 Ibid.

recognition of United States superiority and that from the Soviet viewpoint, the emplacement of missiles in Cuba represented a cheaper way of narrowing the gap than building more ICBM's.

Further evidence that the Soviets recognize United States strategic military superiority while not acknowledging this openly-may be found in the important new book on Soviet military strategy edited by Marshal of the Soviet Union V. D. Sokolovsky. The book gives a very detailed account of United States strategic nuclear striking capabilities.9 example, the authors give the following description of United States efforts:

The Minuteman missile, with its increased invulnerability, is considered the most promising. On the basis of test results the United States is trying to improve its reliability, accuracy, range and reentry capability, and is speeding up its test program to obtain more operational data. 1961-1962 budget provides for doubling the capacity to produce these missiles and to create the necessary reserve production capability.10

The authors estimated that the United States would have approximately 800 Minuteman launching sites by 1966 and pointed out that these missiles would be underground. This numerical listing of United States current and projected military capabilities of the strategic delivery variety makes it quite clear that the Soviets must realize that the United States strategic delivery capabilities are superior to their own. Their knowledge of these capabilities cannot help but have a sobering effect on the thinking of Soviet political and military leaders. This writer, who visited the Soviet Union in April of 1964 and talked with many high-ranking Soviet military leaders, came away with the clear impression that the Soviet military are fully aware of the dangers of a military conflict between the United States and the Soviet Union and are deeply desirous of avoiding any such engagement.

STRATEGIC OPTIONS

Capabilities, however, are only one side of the coin of strategy: there must also be a conceptual framework for employing those capabilities. Given United States superiority

⁹ See H. Dinerstein, L. Gouré and T. Wolfe, Soviet Military Strategy with Analysis and Annotation, April, 1962, as reprinted by The RAND Corporation, pp. 168–191.

¹¹ Ibid.

both in numbers of nuclear delivery vehicles and in the high degree of invulnerability as the result of "hardening"—i.e., placing the missiles underground and beneath the sea in submarines as well as the dispersal, and highly alert posture, of much of our bomber force—what strategic options are open to the United States? What is currently United States strategy? Fortunately, we can gain a fairly clear picture of how our strategy is evolving from a number of frank pronouncements made by leading Administration officials from the President on down and, specifically, by Secretary of Defense Robert S. McNamara.

The period from at least 1954 to the assumption of power by the Kennedy administration has been called the era of "massive retaliation" as far as United States strategic thinking was concerned. On January 12, 1954, the then Secretary of State John Foster Dulles, speaking to the Council on Foreign Relations, announced that the United States would henceforth "depend primarily upon a capacity to retaliate instantly by means and at places of our own choosing." This statement, which became known to history as the "doctrine of massive retaliation," suggested, at least by implication, that the United States would no longer allow the Communists to monopolize the initiative by choosing the time and place of the conflict. No longer would the United States be compelled to meet aggression at the level of violence proposed by the Communists. Actually, the United States threatened to redress the imbalance of military power favoring the Communists at the tactical level by invoking its superiority at the strategic level.12 In short, the doctrine of massive retaliation constituted an effort to substitute a declaratory policy of threatening to attack Soviet or Chinese urban centers rather than to deploy tactical forces as a response to local Communist aggression.

The theory of "massive retaliation" came

under sharp criticism from many, both in and outside the Government. Many critics pointed out that such a policy was inadequate to meet challenges which fell below the threshold of national survival. They felt that the threat to bomb enemy urban centers in response to lower level provocations was not a strategy at all, but a kind of "spasm" response and that such a strategy would become highly dangerous once our principal opponent achieved the capability to destroy United States population centers.

THE NEW THINKING

Accordingly, as the new Administration took office, a thorough review of United States military posture and strategy was undertaken. Perhaps one of the best general ways of characterizing the thinking of the new Administration in the area of military strategy is that it sought at all levels to move from the "all-ornothing-at-all" type response, for which many critics took the Eisenhower administration's strategy to task, and to provide the kinds of forces which would give United States policy makers more freedom of choice in countering enemy challenges. At the strategic level, this took the form of thinking more in terms of counter-force strategies and much less in terms of a counter-city response.

The new concept has been called, among other things, "the controlled strategic war or no-cities theory." Mr. McNamara first publicly unveiled the new strategic concept in an address to a commencement audience at the University of Michigan in June, 1962. He stated:

The United States has come to the conclusion that to the extent feasible, basic military strategy in a possible general nuclear war should be approached in much the same way that more conventional military operations have been regarded in the past. That is to say, principal military objectives, in the event of a nuclear war stemming from a major attack on the Alliance, should be the destruction of the enemy's military forces, not of his civilian population.¹⁸

It was during this speech, too, that Mr. Mc-Namara made, in an obvious allusion to France, his famous statement about the indi-

¹² See Walter F. Hahn and Alvin J. Cottrell, "Fashions in Strategy," *Army*, February, 1963, p. 43.

¹³ Address at the Commencement Exercises, University of Michigan, Ann Arbor, Michigan, June 16, 1962. Text released by the Department of Defense Office of Public Affairs Document, No. 980–62.

visibility of general war forces saying:

We are convinced that a general war target system is indivisible, and if, despite all our efforts, nuclear war should occur, our best hope lies in conducting a centrally controlled campaign against all of the enemy's vital nuclear capabilities, while retaining reserve forces all centrally controlled.¹⁴

Along with the development of the strategic delivery posture required to implement a controlled war strategy, the Kennedy administration gave great attention to the much neglected question of command and control. Accordingly, in order to strengthen the United States command and control machinery, the Kennedy administration began to develop airborne and seaborne command posts and to harden and disperse land-sited command posts to insure the survivability of these vital communications in a post-nuclear attack environment. Secretary McNamara pointed out that it was not enough merely to achieve a high degree of survivability for our missiles, but that it was vitally necessary to have highly invulnerable command and control machinery which would enable the United States to utilize its surviving strategic capabilities in a way consistent with United States national security goals.15 With a well-protected command and control system, the Secretary contended, we may have several options in the event of an enemy action. "We may," he said,

have to retaliate with a single massive attack. Or we may be able to use our retaliatory forces to limit damage done to ourselves, and our allies, by knocking out the enemy's bases before he has had time to launch his second salvos. We may seek to terminate a war on favorable terms by using our force as a bargaining weapon-by threatening further attack. In any case, our large reserve of protected firepower would give an enemy an incentive to avoid our cities and to stop a war. Our new policy gives us the flexibility to choose among several operational plans, but does not require that we make any advance commitment with respect to doctrine or targets. We shall be committed only to a system that gives us the ability to use our forces in a controlled and deliberate way. 16

16 Ibid.

SECOND-STRIKE CONCEPT

Thus, the thinking of the Administration on the kind of force posture we are developing and the strategic options this posture will make available to the policy makers has been clearly and frankly enunciated at the highest levels. Perhaps the most significant aspect of United States policy as it has evolved since 1961 has been the development of our forces and strategy on the basis of a second-strike concept. Naturally, the new strategy has not been uncritically received either inside or outside official circles or in allied countries. Many at home and abroad believe that it is completely unrealistic to assume the possibility of limiting a strategic nuclear exchange to purely military targets. Some have contended that the Administration's approach is contradictory, pointing out that the Kennedy administration sought to increase Nato's conventional forces because it did not believe a war with tactical nuclear weapons could be limited for long. If a tactical nuclear engagement cannot be controlled, they argue, how can the Administration deem it possible to control a war waged with strategic nuclear weapons?

In Allied countries, the strategy has been criticized on the grounds that by communicating to the Soviets that the United States plans initially to limit its attack to enemy military forces, it may diminish the present deterrent to Soviet thoughts of adventures in Europe. It has also been pointed out that the Soviets are gradually hardening and dispersing their own missiles and placing increased emphasis on submarine-launched vehicles, thus rendering a counterforce strategy such as the one projected by Mr. McNamara increasingly difficult and ultimately impossible. Attention is also invited to the fact that the Soviets consistently have contended that they would not limit their attacks to United States forces but would strike at the American continent at large.

Fully aware of these criticisms, McNamara, speaking for the Administration, has argued that it still makes strategic sense to build the kind of strategic forces that would enable us

¹⁴ Ibid.

¹⁵ Address before the Fellows of the American Bar Foundation Dinner, Chicago, Illinois, February 17, 1962, Department of Defense Office of Public Affairs Release, No. 239–62, p. 6.

to respond in more than one fashion. He asserts that, if general war should occur despite all our efforts, inducing the Soviet government to follow our suit in limiting damage to civilian populations is still an extremely worthwhile objective. This writer finds it difficult to disagree with him.

LOCAL DETERRENT POWER

Thus far we have discussed United States military policy and strategy on primarily the strategic delivery level. Although there is, of course, a strong link between the strategic nuclear deterrent and local deterrent power, it is clear, nevertheless, that the United States military posture for dealing with more limited crises such as in the Nato area, the Middle East or Asia is somewhat less satisfactory than our strategic deterrent posture when compared with Soviet and Chinese local power in these areas.

True, the Soviet and United States-Nato forces opposing each other in Germany are roughly equal. The Soviets apparently have approximately 20 divisions in Germany, whereas Nato has approximately 23 divisions in varying states of readiness. The Soviet satellite divisions are of an unknown quantity and probably would not be very reliable for offensive actions. But Nato forces would not be adequate if the Soviets reinforced their East German garrisons by bringing up forces from European Russia. At the same time, such a reinforcement would have to be so substantial that it could hardly go undetected by Nato. Indeed this is part of the theory determining the size of the Nato force goal at 30 divisions -namely, that this number will constitute a force of sufficient size to render the Soviet force in Germany inadequate to defeat Nato without large-scale reinforcement.

STRENGTH IN EUROPE

In Europe, there can be little doubt that the Nato position remains strong precisely because the stakes are so high and the threat of escalation to general nuclear war so great that there is little likelihood of a deliberate Soviet military maneuver. The greatest danger is war by some miscalculation and

there can be no question but that Nato's capabilities could stand improvement for meeting such a contingency.

In the Middle East and Asia the problem is very different. In many instances the challenges in these areas are not military but political. The great threat here is indirect aggression, and in most cases this threat can best be met by creating the kind of political, social and economic environment which reduces the likelihood of coups and insurgency. Certainly this fact has been well recognized by the Administration. In fact, the Kennedy-Johnson administrations have placed so much emphasis on counter-insurgency that they have been accused of overdoing it. Hanson Baldwin has suggested that the result of the great concentration on unconventional warfare could, if continued, lead to "a perhaps dangerous over-emphasis upon one, but only one, type of warfare."

To sum up, the United States is superior to the Soviet Union and its allies at the strategic nuclear level and this capability still continues to compensate for some of our deficiencies, such as those in the Nato area and in some of the "grey areas" where the principal threat is largely but by no means exclusively political. Superior United States strategic power, while being far from a full or ultimate answer to local aggression emanating from the Soviet Union or China, is still applicable in varying degrees not only in Europe, where the stakes are very high, and thus the possibility of esca-

(Continued on page 113)

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"The damage-limiting strategy must deter an enemy attack on this country, but its purpose is equally to destroy the military forces—both conventional and atomic—that an enemy could use abroad, especially in Western Europe."

The New Military Strategy

By GORDON H. EVANS Strategic Analyst

urs is an age of great debates and great decisions. Yet they do not always coincide. On the contrary, the past few decades have seen great debates over small decisions and, in at least one instance, a great decision has been taken openly with little public debate. Somehow its significance has not been widely understood.

The damage-limiting strategy has been announced by Secretary of Defense Robert S. McNamara. Make no mistake; this is an important decision. It marks the end of a major American strategy of post-World War II, the strategy of massive retaliation. Its consequences may be enormous. It does not deserve to be ignored.

The first hint that the Administration of the late John F. Kennedy was considering a major overhaul of our national war policy came in March, 1962, in a statement by Secretary McNamara on the ill-fated bomber—the RS-70. At that time, he discussed the consequences of total nuclear war, an Armageddon involving virtually all of the strategic nuclear forces of both powers, hurled at each other in a final orgy of destruction. McNamara remarked:

While calculations of this sort [i.e., regarding total war] are useful for estimating the adequacy

of our programmed forces under extreme conditions, it should be pointed out that these forces may not necessarily be used in this manner. Indeed we are implementing command and control processes at all levels of authority to insure that our response can be graded by degree, by geographical and political area, and by target type as would be appropriate to the type and extent of any enemy attack. (Italics added).

Later in June, 1962, at Ann Arbor, Michigan, the Secretary expanded the concept further, and in another direction:

The U.S. has come to the conclusion that to the extent feasible, basic military strategy and a possible general nuclear war should be approached in much the same way that more conventional military operations have been regarded in the past. That is to say, the principal military objective, in the event of a nuclear war stemming from a major attack on the allies, should be the destruction of the enemy's military forces, not his civilian population.

McNamara spoke of "A strategy of controlled response" which would give us "some hope of minimizing damage in the event that we have to fulfill our pledge to the alliance."²

Still later in 1962, in an interview with Stewart Alsop of the Saturday Evening Post, McNamara said:

... today following a surprise attack on us, we would still have the power to respond with overwhelming force and they would not then have the capability of a further strike. In this situation, given the highly irrational act of an attack, of an attempted first strike against us, such a strike seems most likely to take the form of an all-out attack on both military targets and population centers. This is why a nuclear exchange confined

¹ "Statement of Secretary of Defense Robert S. McNamara on the RS-70," News Release, Department of Defense, Office of Public Affairs, March 15, 1962.

² "Remarks of Secretary of Defense Robert S. McNamara at the Commencement Exercises, University of Michigan," News Release, Department of Defense, Office of Public Affairs, June 16, 1962.

to military targets seems more possible, not less, when both sides can assure second strike capability.³

And, in his annual statement to the House Armed Services Committee in January, 1964, he asserted that the United States would not rely upon a "cities only" capability, which (though requiring a smaller number of nuclear missiles) might lead to the destruction of both American and Soviet society.⁴

DETERRENT AND COUNTERDETERRENT

With the growth of conventional Soviet military strength in the mid-1950's, massive retaliation—later called the thermonuclear deterrent—was more and more put forward by a United States government anxious, even desperately anxious, to prevent the Soviet Union from using its land forces to upset the balance of power in the Eastern Hemisphere. Our threat to bomb Russia, if the Red Army attacked our vital overseas interests, was repeatedly stressed. True enough, we were content to phrase our warnings in veiled terms; i.e., in case of Soviet aggression in Europe, "all means" would be used to prevent it, "including nuclear weapons."

However, with the growth of the Soviet nuclear strike forces, the so-called counter-deterrent, massive retaliation began to be less believable. Russia's growing ability to do great damage to the American homeland meant that we would become less willing to unleash an attack. It would hardly prove logical to commit suicide in our own interests. A Soviet invasion of Europe would, if successful, certainly shift the world balance against the United States. But, given the alternative of this or general war, would we not choose the former?

By 1960, American military strategy was highly polarized. At one extreme lay Armageddon, an all-out exchange between ourselves and our enemies, on the other was a local type of war, using chemical explosives or low-yield nuclear weapons.

Military thought generally reflects the lessons of prior wars. In France, in 1914, the German and Allied generals were prepared to re-fight the mobile engagements of the Napoleonic and Franco-German wars. They had not grasped the revolution in tactics produced by rapid-firing weapons. In 1939, the Allies were prepared to fight the war of 1914-1918, because they had not appreciated the significance of air and armor, which returned mobility to war. Again, in the late 1950's and early 1960's, American strategic thinking reflected the lesson of total war we had learned with the Axis and the lesson of local war which had been learned in Korea and from the guerrilla actions against the Communists in Malaya, Greece, and other countries.

However, it excluded the middle, the range of possibilities which lie between Armageddon and local insurgency. We could conceive of doomsday or the circumscribed engagement, but not of "strategic limited warfare," the case between the extremes. It was Secretary McNamara who began to call attention to just this strategic possibility.

Ideally, the new strategy should be explained with the help of specific models or war games; only then can the way it may work out in actuality be fully seen. Lack of space prevents us from presenting such models.

Even without such models, it is fair to say that "limited strategic" war may be largely an affair of bottlenecks, fought against communication systems or especially vital sectors of the hostile economy. The engagement might even superficially resemble the Second World War, with Western and Eastern forces locked in many parts of the world, with a determined American attempt to reinforce its allies abroad, and a determined Soviet attempt to prevent us from doing so. But, unlike the former war, nuclear weapons might be used extensively against the allies and bases of the enemy overseas, with very little bombardment of the enemy homelands. Such a war might even proceed very slowly.

³ See, "McNamara Thinks about the Unthinkable," Saturday Evening Post, December 1, 1962. An analysis by Alsop, "Our New Strategy; The Alternatives to Total War," is contained in the same issue. Alsop regarded this as the "most important piece I've ever written."

^{4 &}quot;Statement of Secretary of Defense Robert S. McNamara before the House Armed Services Committee on the Fiscal Years 1965-69, Defense Program and 1965 Defense Budget," January 27, 1964.

The popular idea of nuclear war is one of great speed. This might not be the case. Fear of a sudden, violent return attack might lead to slow-motion nuclear warfare: missiles in twos or threes might dribble back and forth between continents but with the assault never so heavy as to panic the enemy into total reaction.

ESSENCE OF THE NEW STRATEGY

The McNamara concept is an attempt to take the general population out of strategic warfare. It is based on the hope that a future war will minimize the loss of life and property both in the United States and elsewhere. As McNamara said at Ann Arbor, "Our nuclear strength . . . makes possible a strategy designed to preserve the fabric of our societies if war should occur."

This strategy has two key parts: 1. It is a strategy of controlled response, with degrees of retaliation programmed to the severity-level of the attack upon us. As Alain C. Enthoven, Deputy Assistant Secretary of Defense, recently put it:

... our approach is to give the President a range of choices so that he can select the plan whose targets and timing of attacks are most appropriate to the circumstances at hand....

It stresses "options, deliberation, flexibility and control." 5

2. It does not primarily aim at the enemy's cities (unless, presumably, he strikes first at ours), but is directed at armaments-in-being. We should note that in both these key elements there is almost the direct opposite of what Enthoven calls the "spasm of massive retaliation."

WILL THE SOVIETS PLAY?

A vital question is whether or not the Soviets will cooperate with our strategic plan should war break out. Will they "play the game"? The likely first answer is no. However, a little thought leads one to suspect that Moscow may well cooperate. Powerful inducements exist for the Soviets to follow us in this damage-

limiting strategy. In fact, their reasons are much like ours. Certainly it would be in their interests to avoid universal slaughter. The Khrushchev government has repeatedly voiced a realistic horror of general nuclear war. Probably it is sincere in its horror. Certainly, short of a unilateral technical break-through, the Russians would get as much as they could give in a general nuclear exchange. Hence, prudence suggests that the Soviets make their war plans parallel to ours.

But still an interesting problem arises. In order for the Soviet military to "play the game," they must know that we plan to play, and understand the rules. The new strategy implies some mutual knowledge of designs. If these are kept entirely secret, part of the gain may be lost. Though the United States might be prepared to fight in damage-limiting terms, the Soviets might assume we were not. They might (though the possibility is hopefully near the vanishing point) unleash a total attack at the North American continent, having only an expectation of similar treatment. For this reason, the new strategy must be announced to the potential enemy. This is exactly what McNamara was doing when he spoke in 1962.

DISADVANTAGES FOR US

However, announcement has a disadvantage for us. It may lessen the Soviet unwillingness to go to war abroad. The more general question of how the strategy may affect overall peace is one that we will return to. But at an operational level, Washington must evaluate the risk that announcement of the damage-limiting concept will desolve whatever residual may remain in the concept of massive retaliation, and thus encourage the Russians to attack our allies. We can never be sure that Moscow does not take the thermonuclear deterrent seriously, and that its withdrawal might cause the Soviet Union to think the liability for aggression was reduced. This factor may be responsible for a certain soft-peddling of the new strategy. It has never been driven home publicly in highly specific terms. The problem has been to let

⁵ Quoted in Hanson W. Baldwin, "Stalemate—Or?" U.S. Naval Institute Proceedings, April, 1964, p. 51.

the Russians know about it, but not to give them any "ideas."

NOT COUNTERFORCE

The damage-limiting innovation is *not* the Air Force's counterforce doctrine. It has been interpreted as such, however wrongly. McNamara excludes counterforce (in the sense of a full first-strike capability) from the realm of possibility. He says:

While a "cities only" strategic retaliatory force would, in our judgment, be dangerously inadequate, a "full first strike force" on the basis of our estimates of the Soviet nuclear strike forces for the fiscal years 1967–1969 is simply unattainable. Moreover, I know of no responsible Pentagon official, certainly not on the Joint Chiefs of Staff, who proposes such a force. . . . a "full first strike" capability would have to be accompanied by vast programs of anti-missiles, anti-bombers and civil defense. Even then, our calculations show that fatalities would still run into tens of millions.⁷

The counterforce strategy requires the United States or the Soviet Union to be able to strike first safely against the nuclear forces of the enemy, and reduce them so that they could do very little retaliatory damage. As Mc-Namara indicates, with "hardening" and dispersal of nuclear strike forces on either side, this option has become impractical. Not only might a counterforce assault generate devastating quantities of fallout (as it tried to "dig out" the hostile missiles), but there is very little chance that one side would be able to wipe out enough of the enemy's strike cap-

⁶ Uncertainty over how far to go in stressing the new war plan may account for a curious anachronism which appeared recently. McNamara wrote: "The Soviets know that even nonnuclear aggression at that high end of the spectrum of conflict (i.e., in West Europe) so threatens our most vital interests that we and our allies are prepared to make whatever response may be required to defeat it, no matter how terrible the consequences for our own society." (Italics added). See "Where we Stand," Duns Review and Modern Industry, February, 1964.

This sounds very much like massive retaliation, and put in terms as blunt as Dulles ever used. It either means that the Administration has abandoned the damaging-limiting strategy, that the article was written by an underling uninformed about high policy, or that the Secretary is wavering in his degree of willingness to inform the Soviets about our strategic intentions.

7 "Statement of Secretary of Defense Robert S. McNamara before the House Armed Services Committee . . . ," op. cit., p. 31.

ability to reduce it to complete nullity.

Little discussed in this context, but definitely present, are chemical, bacterial and radiological weapons. These horrible weapons, on which both powers work in secret, are in themselves a formidable strategic reserve. There is very little possibility that an aggressor could destroy them all or the means of delivering them. Thus, even were he able to wipe out the ordinary nuclear retaliatory forces of his opponent, he might still not be able to enforce his will, or move against the cities of his victim, for fear that in desperation the victim would let loose bacteria, chemicals or radioactivity.

The damage-limiting strategy is aimed primarily at Soviet conventional and tactical nuclear military capability. McNamara emphasizes its usefulness in protecting our allies. Designed primarily to counter the enemy's forces, its target is a certain type of force. Counterforce seeks to destroy the enemy's long distance capability aimed at the United States. The damage-limiting strategy must deter an enemy attack on this country, but its purpose is equally to destroy the forces—both conventional and atomic-that an enemy could use abroad, especially in Western Europe. Thus it is a double purpose doctrine, which includes the intercontinental deterrent function, plus a purely military purpose.

A TRIAL BALANCE

Can we draw a trial balance of the new strategy? On the advantage side, the major one is certainly the avoidance of Armageddon. A second advantage is that it makes civil defense a practicable matter for the first time. In the era of massive retaliation, there was an (Continued on page 114)

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"Since the end of the Korean War the United States has been spending more than half of the total federal budget on military expenditures." Nonetheless, this specialist feels that, "although these expenditures and jobs make the defense impact on the economy important, a decline in the size and composition of the budget would seem within manageable proportions."

Disarmament: Economic Effects

By Otto Feinstein

Assistant Professor of Economics, Monteith College, Wayne State University

HERE HAS LONG BEEN a split in views concerning the economics of disarmament. One group of people sees the economic effect as a major benefit that would release resources for the unfulfilled needs of the individual and the society. They point to the fact that the world arms budget is equal to the total national income of the underdeveloped nations of the world¹ and that neither the civil rights nor the poverty question in the United States, nor the poverty question abroad can be solved without reorienting the use of our resources from preparing for war to preparing for peace.

The other group sees the economic effects of shifts in the arms budget, and certainly of declines in arms spending, as leading to unemployment, chaos and to conditions which can only further hate and terror. They point to the poor in our own society, and to the poverty abroad; they question the economy's ability to deal with an additional problem of unemployment, if it cannot deal with the existing one. These people see defense expenditures as holding the economy together.

This division of opinion is not new. It

existed during World Wars I and II and the events since then have done little to change these two basic economic orientations. The lack of any real debate until recently was not due to the victory of one view over the other. It was due to the fact that very few people believed that any cut in military expenditures was in sight. And since the problem did not seem to exist in reality, it was left as an area for dreamers and theoreticians.

Recent events have made the economics of disarmament an item of major concern. Once again voices are heard predicting either benefits or disasters, opportunity or problems, from the impending cuts in the arms budget. In what follows we shall investigate the nature of the problem, its economic and political implications, and the policies that have either been recommended or have actually been implemented.

The psychology of the cold war led to a situation in which any discussion of arms expenditure reduction was dismissed on the grounds that a decrease in defense budgets meant a decrease in national security. But, as the public became aware of the fact that the United States had a stockpile of deliverable nuclear explosives equivalent to seven tons of TNT per man, woman and child on this planet,² the question of how much defense is enough began to be raised.

Since then there has been much discussion

Nations, 1962).

² See President John F. Kennedy's "American University Address," The New York Times, June

24, 1963.

¹ See United Nations Department of Economic and Social Affairs publication, *Economic and Social Consequences of Disarmament* (New York: United Nations, 1962).

about the concept of "overkill." Some have claimed that the United States has an overkill capacity of 1,250, which means that the United States could destroy the 140 Russian population centers 1,250 times over. Russian equivalent has been suggested at 145 overkill capacity against United States population centers.3 Others have criticized the idea of overkill4 and the discussion has taken on national dimensions. The essence of the overkill argument is that one can reach a point where additional military power, or the development of additional components of a defense system, are a pure waste, in the sense that the additional power is useless. If you have enough weapons to destroy all projected targets, building new ones will not help since you cannot destroy a target more than once, and therefore you are actually weakening yourself by using your resources in the wrong endeavor. This debate is of military consequence, and part of it seems to have been integrated into government thinking in the recent past.

MILITARY BUDGET DECLINE

Secretary of Defense Robert S. McNamara pointed to this new strategic situation in his talk before the Economic Club of New York on November 28, 1963.⁵ While indicating that United States operational long-range ballistics missiles would be increased to 1,700 by 1966, and that other increases were also projected, he pointed out that the United States annual military budget would decline.

... The fact that further increases in strategic force size will at last encounter diminishing returns—which is largely the effect of the very large investments the U.S. has made in this area—should be reflected in future defense budgets. The funding for the initial introduction of missiles into our forces is nearing completion. We

³ See report, Seymour Melman (ed.), A Strategy for American Security (New York: Lee Offset Press, March, 1963).

⁴ See Amrom Katz, "The Myth of Overkill," Air Force, April, 1964.

⁵ Reprinted in Bulletin of Atomic Scientists, March, 1964. ⁶ See "The News of the Week in Review," The

New York Times, April 26, 1964.

7 See Roswell Gilpatric, "Our Defense Needs,"

Foreign Affairs, April, 1964.

can anticipate that annual expenditures on strategic forces will drop substantially, and level off well below the pesent rate of spending.

He also pointed out that in the area of tactical weapons, the same point was being approached, while recurring costs in modernization and research would probably not be eliminated.

Hanson Baldwin, The New York Times military analyst, recently gave an up-to-date summary of the present East-West arsenals.⁶ (See also the articles on "Weapons and Technology, 1964" and "Weapons and Men, 1964" in the July, 1964, issue of Current History.) However, despite the formidable armories already on hand, production on more of these weapons and on new ones is going ahead.

It is within this context of massive armament that former Deputy Secretary of Defense Roswell O. Gilpatric wrote, "... the cut in defense expenditures does not imply a cut in the level of U.S. military preparedness." It is instead "essentially a consequence of energetic efforts during the previous three years to close certain gaps in our defense posture." He pointed to the possibility of "an annual level of defense expenditures about 25 per cent under the current rate by 1970." This represents a cut-back in spending, and without disarmament.

These announcements indicate clearly that a decline in the defense budget is possible without the danger of military weakness or the need to reach a disarmament agreement. The problem of the economic effects of this new situation is now very real and practical.

Changes in the cold war have made the problem even more immediate. The signing of the partial test ban treaty was the first such change. Aside from dealing with the health problems that result from testing, this was the first recognition of a new international situation. The Eastern alliance and the Western alliance were beginning to break up, thanks to Mao Tse Tung and Charles de Gaulle, respectively. The danger of a wider spread of nuclear weapons and the weakening position of the United States in its camp and of the U.S.S.R. in its camp were reflected in the signing of the treaty.

Further changes soon followed. In December, 1963, the Soviet Premier announced a 600,000,000 ruble cut in the Soviet military budget for the 1964 calendar year. Similarly, the United States President's budget proposal for the 1965 fiscal year contained about \$2 billion less for defense than had been anticipated. Interestingly, the two sums turn out to be 4 per cent of each country's defense budget.

Less than 5 months later, on April 21, 1964, President Lyndon Johnson, Premier Nikita Khrushchev, and the British Prime Minister, Sir Alec Douglas-Home, announced that each country would make substantial cuts in the production of plutonium and enriched uranium.⁸

In the meantime outdated military installations were being closed. On April 23, 1964, President Johnson announced the second series of military installation closings. The first had affected 27 bases in the United States; this one affected 22 bases. Secretary of Defense McNamara stated that installations and military contracts should never be considered as permanent economic activities in any given area, nor should they be thought of as projects to absorb unemployment. It was rumored that over 100 additional defense installations and a number of naval shipyards would soon be closed.

Whereas talk of such a cut-back was greeted with much disbelief a few short years ago, the present reaction in most areas concerned is one of impending economic collapse. A good example is the closing of the Gross Ile base in Detroit announced on April 23. This announcement warranted a two inch headline in the Detroit papers. The base has employed 620 military and 90 civilian employees; it has an annual payroll of \$4 million; spends \$150,000 on local purchases; and uses \$500,000 annually for fuel. That most of the personnel

would be employed at other military installations and that the base was slated for reconstruction into a Coast Guard air rescue facility at a cost of \$2,388,000 was lost toward the back of the news story. At the same time, an announcement that the Chrysler Corporation would spend \$200,000,000 in Detroit in the coming year for automobile plant and equipment was given small play, although it is of far greater economic importance to the region. Preparing for this type of reaction to any future cut-backs warrants the greatest amount of study so that the real problems can be dealt with and panic avoided.

THE ECONOMIC IMPACT OF DEFENSE SPENDING

Since the end of the Korean War the United States has been spending more than half of the total federal budget on military expenditures. The annual expenditure on national security during the post-Korean period has been about 10 per cent of the gross national product. About 9 per cent of the United States labor force—6.7 million people—is employed in federal and industrial activities related to defense.

Deputy Secretary of Defense Gilpatric told the Senate Subcommittee on Employment and Manpower on November 6, 1963:9

Specifically about \$30 billion out of a roughly \$50 billion Defense Budget, goes for things not markedly-or often not at all-different from ordinary defense markets; \$20 billion, roughly, goes for salaries and allowances to servicemen and civilian employees. . . . Another \$10 billion goes for military purchases of food, clothing, medicines, and other soft goods and services from producers who obviously face no significant conversion problem provided that the civilian economy is healthy and growing. Only about \$20 billion goes for uniquely military hard goods. Even in this category a large share, perhaps half or more, goes for products whose manufacturers could, provided the economy was firm, convert readily to civilian markets.

Of the 6.7 million people who work in defense related work, 2.8 million are active military duty personnel, and 1 million are civilians employed by the Department of Defense, the Atomic Energy Commission, and the National Aeronautics and Space Administration. Ac-

⁸ For the texts of the Johnson and Khrushchev statements, see *Current History*, July, 1964, pp. 47-48.

⁹ See report of the U.S. Senate Committee on Labor and Public Welfare, Subcommittee on Employment and Manpower, Convertibility of Space and Defense Resources to Civilian Needs: A Search for New Employment Potentials (Washington, D.C.: U.S. Government Printing Office, 1964).

tually 47 per cent of the federal civilian employees are in these three governmental agencies. Another 2.7 million persons, about 5 per cent of all United States non-agricultural employees, are directly or indirectly employed in supplying goods and services to the federal defense related agencies.

Although these expenditures and jobs make the defense impact on the economy important, a decline in the size and composition of the budget would seem within manageable proportions. After all, we converted after World War II, when 45 per cent of the GNP came from military expenditures. But the magnitude of the problem is best understood when we realize that neither the expenditures nor the jobs are evenly spread over the communities and industries of the United States.

INDUSTRIAL CONCENTRATION

Seven industries absorb about 90 per cent of the awarded defense contracts. They are heavily dependent upon military orders for their business: 100 per cent of ordnance, 93 per cent of aircraft, 60 per cent of ship and boat building, 21 per cent of electrical machinery, 20 per cent of instruments, 13 per cent of primary metals, and 10 per cent of refined petroleum products were considered as military output in 1962.¹⁰

The concentration by company is very great: 100 companies received 72 per cent of the prime contracts; 56 of these were engaged in missile, space, or electronics work in aircraft and missiles; 10 were suppliers of aviation gasoline or other petroleum products; 7 each were automotive, shipbuilding, ammunition, and service companies; 5 were in construction, and one company manufactured rifles.

Further compounding this concentration, 25 of these industrial producers receive 50.8 per cent of the prime contracts and although their dependence upon them as a major share

¹⁰ See Murray Weidenbaum, "Economic Adjustments to Disarmament," *University of Washington Business Review*, February, 1963.

of their business varies greatly, it is usually considerable. (See Table I.)

The greater the dependence of the company on military contracts the harder it is for it to adjust to non-military work. While selling in the military contract business is chiefly a lobbying operation, marketing, which is the key to civilian business, is unnecessary. The economics of the firm are also changed. The defense industry wants the best and will usually pay on a cost plus fixed per cent profit basis. A company geared to the civilian market would probably go bankrupt if it applied this principle. Determination of the market and the price is the key in private business. Conversion of these firms thus implies a complete revision of procedures and retraining of management and sales personnel. many military producers after World War II, the new military producers are not going back to peace-time production; they have never produced for the civilian market. They are thus confronted with developing either a civilian or governmental market for their products.

One of the remaining problems in estimating the impact of defense spending on industries, companies and regions is that we have only partial information as to sub-contracting, that is, the prime-contractor's practice of buying goods and services from another company. It has been estimated that the size of sub-contracting may be up to 50 per cent of the prime-contract value.¹¹

GEOGRAPHIC CONCENTRATION

Concentration of defense income and employment by region is also marked. Over 30 per cent of the manufacturing employment in Kansas and California, and 29 per cent in the state of Washington, 24 in New Mexico, and 22 per cent in Connecticut, as well as over 15 per cent in Utah, Arizona and Colorado and over 10 per cent in Texas, Missouri and Florida, were in the defense industries. New York and Massachusetts had over 8 per cent in this industry. Over 50 per cent of the defense workers were in California, New York, Massachusetts, Connecticut, New Jersey, Illinois, Ohio, Pennsylvania, and Washington.

Many states have a large part of their per-

Business Review, February, 1963.

11 See report of the U.S. Congress Joint Economic Committee, Subcommittee on Defense Procurement, Economic Aspects of Military Procurement and Supply (Washington, D.C.: U.S. Government Printing Office, 1960).

TABLE I: 25 LARGEST DEFENSE CONTRACTORS

(Fiscal 1962)

Company		(225002 2002	/		
2. General Dynamics Corp. 1,196.6 4.7 64.50 3. Boeing Corporation 1,132.8 4.4 64.94 4. North American Aviation 1,032.5 4.0 75.39 5. General Electric 975.9 3.8 20.84 6. Martin Marietta 802.7 3.1 67.31 7. United Aircraft Corp. 662.7 2.6 59.96 8. American Telephone and Telegraph Corp. 467.7 1.8 4.07 9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 45.06 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91		Company		of total prime	total company
2. General Dynamics Corp. 1,196.6 4.7 64.50 3. Boeing Corporation 1,132.8 4.4 64.94 4. North American Aviation 1,032.5 4.0 75.39 5. General Electric 975.9 3.8 20.84 6. Martin Marietta 802.7 3.1 67.31 7. United Aircraft Corp. 662.7 2.6 59.96 8. American Telephone and Telegraph Corp. 467.7 1.8 4.07 9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 45.06 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91	1.	Lockheed Aircraft Corp.	\$ 1,419.5	5.6	81.27
4. North American Aviation 1,032.5 4.0 75.39 5. General Electric 975.9 3.8 20.84 6. Martin Marietta 802.7 3.1 67.31 7. United Aircraft Corp. 662.7 2.6 59.96 8. American Telephone and Telegraph Corp. 467.7 1.8 4.07 9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 322.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 33.74 20. Ford Motor Company 269.1 1.1 3.33		<u>-</u>		4.7	64.50
5. General Electric 975.9 3.8 20.84 6. Martin Marietta 802.7 3.1 67.31 7. United Aircraft Corp. 662.7 2.6 59.96 8. American Telephone and Telegraph Corp. 467.7 1.8 4.07 9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 3.34 20. Ford Motor Company 269.1 1.1 3.33				4.4	64.94
6. Martin Marietta 802.7 3:1 67.31 7. United Aircraft Corp. 662.7 2.6 59.96 8. American Telephone and Telegraph Corp. 467.7 1.8 4.07 9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 3.37 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 </td <td>4.</td> <td>North American Aviation</td> <td>1,032.5</td> <td>4.0</td> <td>75.39</td>	4.	North American Aviation	1,032.5	4.0	75.39
7. United Aircraft Corp. 662.7 2.6 59.96 8. American Telephone and Telegraph Corp. 467.7 1.8 4.07 9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 <td< td=""><td>5.</td><td>General Electric</td><td>975.9</td><td>3.8</td><td>20.84</td></td<>	5.	General Electric	975.9	3.8	20.84
8. American Telephone and Telegraph Corp. 467.7 1.8 4.07 9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 3.37 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.0 0.7	6.	Martin Marietta	802.7	3.1	67.31
9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	7.	United Aircraft Corp.	662.7	2.6	59.96
9. Sperry-Rand Co. 465.6 1.8 39.56 10. General Motors 449.0 1.8 3.08 11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	8.	American Telephone and Telegraph Corp.	467.7	1.8	4.07
11. Raytheon Co. 406.6 1.6 70.02 12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 <td></td> <td></td> <td>465.6</td> <td>1.8</td> <td>39.56</td>			465.6	1.8	39.56
12. General Tire and Rubber Co. 366.1 1.4 45.06 13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89<	10.	General Motors	449.0	1.8	3.08
13. Douglas Aircraft Co. 365.6 1.4 57.87 14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02	11.	Raytheon Co.	406.6	1.6	70.02
14. Radio Corporation of America 339.6 1.3 20.65 15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. Internatio	12.	General Tire and Rubber Co.	366.1	1.4	45.06
15. Republic Aviation 332.8 1.3 100.00 16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation	13.	Douglas Aircraft Co.	365.6	1.4	57.87
16. AVCO Corporation 323.3 1.3 78.37 17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	14.	Radio Corporation of America	339.6	1.3	20.65
17. McDonnell Aircraft 310.9 1.2 97.11 18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	15.	Republic Aviation	332.8	1.3	100.00
18. Grumman Aircraft 303.6 1.2 91.91 19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	16.	AVCO Corporation	323.3	1.3	78.37
19. Bendix Corporation 285.9 1.1 38.74 20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	17.	McDonnell Aircraft	310.9	1.2	97.11
20. Ford Motor Company 269.1 1.1 3.33 21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	18.	Grumman Aircraft	303.6	1.2	91.91
21. Westinghouse Electric Co. 246.0 1.0 12.76 22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	19.	Bendix Corporation	285.9	1.1	38.74
22. International Telephone and Telegraph 243.6 1.0 24.69 23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26			269.1	1.1	
23. Hughes Aircraft Corp. 234.2 0.9 75.00 + 24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	21.	Westinghouse Electric Co.	246.0	1.0	12.76
24. American Machine and Foundry 187.3 0.7 45.09 25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	22.	International Telephone and Telegraph	243.6	1.0	24.69
25. Newport News Shipbuilding and Dry Docks 185.0 0.7 69.21 TOTAL \$12,994.6 50.8 39.93 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	2 3.	Hughes Aircraft Corp.	234.2	0.9	75.00 +
TOTAL \$12,994.6 50.8 26. Hercules Powder Co. 181.6 39.93 27. Standard Oil Company of New Jersey 180.1 1.89 28. Thiokol Chemical Corp. 178.3 70.02 29. FMC Corporation 160.4 31.67 30. International Business Machines 155.5 8.73 31. Northrop Corporation 150.1 44.26	24.	American Machine and Foundry	187.3	0.7	45.09
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31. Northrop Corporation 150.1 44.26			160.4		
		·		•	
32 Collins Radio Company 150.1 74.01				•	
		Collins Radio Company	150.1		74.01
33. Pan American World Airways Inc. 146.7 29.11		•			
34. Curtiss-Wright Corporation 144.6 62.23	34.	Curtiss-Wright Corporation	144.6		62.23

Sources: M. L. Weidenbaum, Stanford Research Institute, November, 1963; The New York Times, August 16, 1963.

sonal income dependent upon military contracts and installations: 29 per cent of the personal income in Alaska; 22 per cent in Hawaii; 15 per cent in Virginia; over 11 per cent in Washington, Maryland, Washington, D.C., and New Mexico; 10 per cent in California, Kansas, South Carolina, Georgia and Utah.

Bases and plants are concentrated in specific communities which will feel with special intensity any change in defense spending. Defense contracts and installation are of major importance in the Los Angeles-Long Beach Area, San Diego, Seattle, Wichita, Washington, D.C., Boston-Cambridge, Huntsville, Alabama, Newport, Rhode Island, Portsmouth, New Hampshire, Norfolk, Virginia, New London, Connecticut, and many smaller cities and towns.

CONCENTRATION ON RESEARCH

One final area of concentration is the Department of Defense expenditures on the nation's research and development programs. In the 1961–1962 period 46 per cent of the national effort in this area was financed by the Department of Defense, including 60 per cent of all university research and over half of that undertaken by industry. This means that a large proportion of the nation's scientific, engineering and technical competence has been absorbed in research efforts supported by the Defense budget.

PROBLEMS OF CONVERSION

The conversion of industries, firms, regions, and individuals who have been heavily dependent on military expenditures will depend upon a number of factors. The first of these is knowledge of what other products they could produce and what problems a shift to these new lines would present. Studies have been made for a number of industries¹² and such civilian products as rapid transit facilities, industrially produced homes and medical electronics, have been shown as technically feasible substitutes.

While a small beginning has been made in studying the feasibility of conversion, the location of consumer and government markets has been badly neglected. Traffic control systems, medical electronics and educational equipment could be produced, but who will buy them is the big question. And while we know that about one-third of the American public would be potential consumers if they had more than a minimum income, we have yet to agree whether and how to provide them with the income. The "war against poverty" is clearly a step to establishing a more viable consumer market, as is the pending civil rights legislation and the recent tax cut. But we have yet to discover how specific industries and regions will find markets for their talents. Even such institutions of learning and wisdom as the universities have yet to make preparations should appropriations for defense-sponsored research and development decline.

Unions, management and government have at best taken feeble steps towards any solution of the problem. A brief survey of the main defense contractors by *The New York Times* indicated either a lack of immediacy or a reluctance to discuss the issue. Nor has what limited pioneering there has been received much impetus until very recently.

In October, 1963, Senator McGovern introduced S. 2274 to establish a National Economic Conversion Commission which would make preparation for conversion in all the defense contract and installation areas mandatory: the issue was finally on the national agenda. In December, 1963, President Johnson established the Committee on the Economic Impact of Defense and Disarmament.

On March 16, 1964, the city council of Baltimore passed legislation for a metropolitan-wide Commission on Problems of Economic Impact of Defense and Disarmament. Similar legislation was pending before the state legislatures of New York, Massachusetts, California and Washington. In the House of Representatives in Washington, a bill to prepare for conversion was also introduced.

But the McGovern Bill is still awaiting action and the President's Committee has been very quiet. And, even while people consid-

¹² See report of the U.S. Senate Committee on Labor and Public Welfare, Subcommittee on Employment and Manpower, op. cit.

TABLE II: RECENT AND PENDING LAYOFFS IN 19 MAJOR FIRMS

New York		
Arma Division	1963 to date	1,715
Sperry-Gyroscope	1963 to date	1,750
Reeves Instruments		360
Republic Aviation	1963 to date and scheduled	9,700
Ford Instruments		430
Massachusetts	•	
AVCO	1963 to date and projected	2,770
MITRE	1964	150
Raytheon	1963 to date	8,000
New Jersey		
Radio Corporation of America	1963 to date	4,950
International Telephone and Telegraph	1963 to date	1,300
Bendix Aviation .	1963 to date	1,400
Curtiss-Wright	1963 to date	2,400
General Precision	1963 to date and pending	410
California		
Aerojet	1963 to date and pending	7,000
Douglas	projected now pending	3,750
Lockheed	1963 and pending	2,600
Systems Development Corp.	pending	1,000
Colorado		
Martin		2,800
Washington		
Boeing	1963 to date and pending	14,600

ered these acts, the need for action increased. On March 26, 1964, *The New York Times* carried reports of layoffs and pending layoffs of 67,000 technical, clerical and production workers in 19 major defense concerns. (See Table II.)

Even more recently the April 24 McNamara announcement closing 22 installations meant a cut-back of 10,056 jobs.

While the effects of conversion were thus leading to calls for preparations, Senator Joseph D. Tydings of Maryland suggested that cuts in military spending could be channeled into: 1. expanded programs for urban education, vocational training and technical retraining; 2. providing capital and technical talent to economically depressed areas; 3. larger outlay for classrooms, laboratories, libraries, hospitals, housing, and other public works projects; 4. health nursing care for the poor and the aged; 5. conservation and public

recreation; 6. air and water pollution programs; 7. mass transit programs; and 8. modern agricultural projects. Others called for an increase in aid to under-developed areas for economic development, and still others called for an easing of the tax burden. The conflicting views about the most productive use of the funds now becoming available indicate that the problem of conversion is now one of immediate reality.

Otto Feinstein, in addition to his duties as a professor of economics, has been conducting a study on Michigan's economic myths. The first section, dealing with defense contracts, jobs and affluence, and the second section, dealing with the conversion from World War II, are completed. Mr. Feinstein was editor of Two Worlds of Change (New York: Anchor Press, 1964).

"A promising line of approach to the disarmament problem," as suggested by this author, "would be for us to propose a treaty providing in realistic detail region-by-region steps to a stabilized low-level transitional deterrent, incorporating a rapid approach to parity in both nuclear and conventional weapons. . . . "

Step-By-Step Disarmament

By DAVID R. INGLIS
Theoretical Nuclear Physicist, Argonne National Laboratory

ISARMAMENT is an avowed goal of the foreign policy of both the United States and of the Soviet Union and has been during the buildup of more than half of the armed might of both countries. There are several reasons why the avowed goal is not more vigorously pursued. One widespread opinion is that we cannot have disarmament because the Russians will not agree to a sensible plan. Until recently, a similar opinion was held of the nuclear test ban, yet we did come to a useful agreement on that. This opinion suggests that the "avowed goal" might mean no more than that each side wants disarmament if it can get it on its own terms. During the long and dreary sequence of disarmament negotiations, the terms of each side have typically been such as to perpetuate a superior position in the arms balance or to strengthen a weaker position. That is, the terms have had in most cases a shortterm motivation—a one-sided military advantage for the near future. Yet there have been sincere attempts to narrow the gap.

Most political policies and most political decisions have a short-term motivation, and are typically aimed at solving the immediate and pressing problems in time for the next election. If we look at only the next few years, we have only one other powerful nuclear nation to worry about. It appears militarily practicable for us to maintain superior strength, so this may seem to be the most straightforward and safest way to discourage

attack against us. Furthermore, seeking safety through military strength is the traditional course, inherited from the prenuclear age when there was much less reason to avoid war.

Political decisions that run counter to established custom are very difficult and are made only as the result of a great crusade or inspired leadership. It is much easier to pass a budget appropriation for an established department than to establish a new one. It is also difficult to defeat an appropriation for established activities upon which many political leaders and their constituents are dependent for support. Thus, the fact that we continue on a course of ever-increasing armaments is not necessarily proof that this is the wisest or the only practicable course.

The constitution makes the anachronistic provision that Congress has the power to declare war. World War II was declared only after we had been attacked. If a nuclear war should come, the country might be a shambles and Congress extinct before there would be time to declare war. In the nuclear age, our power to attack or to respond to a nuclear attack rests in the hands of one man, the President. The men who have carried this grim responsibility have been aware how dangerous is the game called "deterrence," that is, the attempt to be ever prepared to prevent an attack by threatening to make a nuclear return attack.

This awareness led President John F. Kennedy to say, on June 10, 1963:

It is an ironical but accurate fact that the two strongest powers are the two in the most danger of devastation. All we have built, all we have worked for, would be destroyed in the first 24 hours.... We seek to strengthen the United Nations, to develop it into a genuine world security system—a system capable of creating conditions under which arms can finally be abolished.

President Dwight D. Eisenhower carried the same burden of responsibilities and made similar statements, as has even Soviet Premier Nikita Khrushchev, who admits that both sides stand to lose a nuclear war.

The nuclear age has brought a new need for disarmament. The fact that disarmament negotiations failed to achieve much before World War II has little bearing on present prospects—the need and the incentives for achieving a new system of world stability are now so much greater than they were. The fact that similar negotiations have failed since World War II seems to mean that the nations have been slow to react to the new realities and the growing urgency.

Faced with the need to make nuclear war less likely, some people favor arms control as a way to perpetuate national military strength, some favor arms control as a step towards eventual disarmament, and some favor vigorous efforts to achieve disarmament, with adequate provisions for world stability, as soon as possible, perhaps with some incidental arms control if it can be negotiated in the meantime.

SMALL STEP CHAIN REACTION

There is surely something to be said for trying to negotiate one small step of disarmament after another. The already successful negotiation of the partial test ban treaty has improved the international atmosphere enough so that it should be easier than it seemed earlier to negotiate a further treaty banning underground nuclear tests. An agreement to ban underground tests might make it easier to negotiate a treaty banning the production of missiles, with adequate inspection, and so on. The hope for a sequence of such small successes, in a gradually improving international climate, is an important aspect of present United States foreign policy. It is ex-

tremely difficult to make a political decision deviating sharply from the course of traditional commitments, and such a "chain reaction" of small steps, each encouraging the next, may indeed hold the greatest hope of breaking away from the ominous threat of a perpetual arms race.

A freeze on the levels of nuclear armaments is the next step being pursued most vigorously at present as a part of United States policy. If successfully negotiated, it may come in the nick of time to prevent the initiation of a long and complex new round of the arms race, with missiles intended for defense calling for everincreasing numbers of missiles for attack. Thus, it is very important that we try to negotiate small steps, including specific measures of arms control, if we can.

The trouble with relying on successive negotiation of many small steps is that the limited advantages inherent in some of the small steps may not provide enough incentive to overcome the obstacles to agreement. If one hurdle is high, the horse may not jump it unless he knows that there is hay in the barn beyond a few more hurdles.

Some small steps towards disarmament are possible with little or no inspection. The first high hurdle on the way to disarmament comes when the number of nuclear weapons is reduced to such a low level that detailed inspection of large areas is needed. Far-reaching inspection is needed at low arms levels in a cautious approach to disarmament because without it there is a possibility that enough nuclear missiles might be hidden to alter seriously the balance of power.

Area inspection is very hard to negotiate in successive small steps. You either decide to let inspectors roam around the country, or you do not. The Soviet Union tries to compensate for its smaller number of intercontinental missiles by maintaining greater secrecy as to their locations than we are able to do in our open society. We can only hope to induce the Soviets to relinquish their secrecy if we are willing to provide an incentive to get over this hurdle in the form of a big step towards disarmament—a big step bringing real disarmament in sight at the end of the course.

This requires negotiating more than one small step at a time.

Inspectors with free access to a whole country are apt to uncover missile locations almost This fact, that "inspection and secrecy don't mix," seemed to be a definite technical roadblock in the way of disarmament, rather than just a hurdle, until a few years ago when it was suggested that both inspection and disarmament should be introduced into one region after another of each country involved.1 This means that there would be a sequence of small steps, but all planned in advance and negotiated in one farsighted agreement. The regional idea sounds rather obvious and elementary when now described, but the fact that this possibility was overlooked during many years of disarmament debate suggests both that it was the result of considerable thought and that it is always worthwhile to go on seeking good new ideas about how to move towards a safe and disarmed world.2

A crucial problem in orderly disarmament is to know how many weapons there are, without needing to know where they are until their turn to be disarmed comes. The "region-by-region disarmament plan" includes a rather special way to use the stepwise disarmament procedure as a sampling process to build confidence that each side is telling the truth about how many weapons it actually has to be disarmed. At the same time it avoids letting other countries know where the weapons are, which might tempt some country to try to destroy almost all of them in a surprise attack, and thus to minimize reprisal.

REGION-BY-REGION DISARMAMENT

Let us see in outline how the region-byregion procedure would work. First, an international disarmament authority must be set up and must organize a large group of inspectors. Each country divides its area into a

number of regions, let us say six regions of approximately equal military value, and then makes a declaration listing the numbers of weapons and other military objects of various kinds in each region. Since nations seem to suspect one another, there may be grave doubts at first whether the lists are honest. It is agreed that on a certain date there will be an unpredictable selection of one region of each country to be sealed off and disarmed in the first stage. This might be done "by lot," or the "other side" might be permitted to choose.

When the choice is made, the inspectors quickly concentrate on the borders and transportation facilities of the selected regions to prevent shipment of arms. Each nation is then required to submit a detailed list of where the weapons previously reported for that region are to be found. The inspectors observe them and see that they are dismantled, if necessary in such a way as not to learn certain critical details of their construction. At the same time and perhaps for the rest of a period of about a year, the inspectors are free to roam through this region and assure themselves that there exist no significant quantities of hidden arms (particularly missiles and aircraft). Once they have done this, and found that the number of weapons agrees with the number on the original list, there is reason to begin to believe by this process of "random sampling" that the original list is honest.

After about a year, the process is repeated in a second region, and so on. At each step the basis for confidence in the original list is increased. Toward the end of the process, this basis for confidence could be very important if, at the last stage, each nation is required to relinquish the last of its nuclear arms in the sixth region and would want to be sure that others were doing the same. Another important feature is that, until a certain region is chosen to be disarmed, the secrecy of location of missile sites and other installations in it is retained.

This is the bare outline, and several modifications and special features could be discussed. For example, there is the problem of how

¹ See Louis B. Sohn, "Disarmament and Arms Control by Territories," Bulletin of the Atomic Scientists, April, 1961.

² See D. R. Inglis, "Region-by-Region Disarmament," New Republic, June 27, 1961, and "Disarmament after Cuba," Bulletin of the Atomic Scientists, January, 1963.

missile-firing submarines and their bases are to be included, perhaps as a separate "region," and there is the possibility that certain types of arms can be retained in an otherwise disarmed region for the sake of local protection.

A more important problem concerns the kind of world stability that can be planned for the end of the process of national disarmament down to the local police level. While all matters of local management and all aspects of national sovereignty, aside from the means of making war, will presumably be retained by national governments, it appears to be necessary to establish some form of reliable world military force capable of preventing any nation from rearming and an equally reliable world political body to make decisions about the role of the world military force. This poses extremely difficult problems, but should not be permitted to prevent the active search for substantial disarmament soon.

THE "TRANSITIONAL DETERRENT"

Perhaps the most hopeful possibility is that both sides will recognize that it is too difficult to agree in advance on the details of the final solution until we have had more experience living together with lower, and carefully controlled, levels of armament. This leads to the idea of the "transitional deterrent"; a carefully balanced and stabilized low-level nuclear deterrent force to be considered as a transitional stage on the way to complete disarmament. That each side could reasonably go to lower levels under appropriate conditions follows from the fact that nuclear weapons are individually so destructive that neither side needs all of its present supply to inflict on the other side more damage than the other side can rationally consider "acceptable." A single nuclear weapon can carry more explosive power than was used in all of the wars of history, including World War II, (and a single long-range missile of the usual type almost that much). Our plans are to have almost 2,000 long-range nuclear missiles by about the end of this year. One hundred would constitute a stupendous threat, if the other side had no more. This lower level of missiles would

be just as effective as would a threat by uncounted thousands, in providing a "nuclear umbrella" under which East-West struggles over various national boundaries could proceed until such problems are resolved.

Thus, a reasonable "transitional deterrent" might be composed of 100 missiles (or 200, or 50) on each side, reliably counted and installed in such a way as to be invulnerable to attack from the other side, invulnerable in the sense that several missiles on the average would be required to destroy one, so that no attack by an approximately equal number could destroy most of them and prevent retaliation. Missiles are protected in holes in the ground called "silos." One way to ensure the security of the remaining missiles would be to have three times as many silos as missiles. Inspectors could then inspect groups of a dozen silos at once, counting the missiles in them, after which the missiles might be shuffled among these silos without inspection. Another way would be to use submarines as missile bases.

The region-by-region disarmament procedure can be employed as a reasonable and cautious way to set up a transitional deterrent. As each region is opened to inspection, the weapons in it could be destroyed with the exception of the silos, leaving an appropriate fraction of the missiles as part of the transitional deterrent.

This, then, provides the possibility for an agreement on a large package of disarmament at once, one which should have greater mutual advantage to the two sides than does any small step in arms control, without requiring a final commitment to go all the way to a disarmed world. That would be left for future negotiation. Its advantages are that it provides both an alternative to a perpetual arms race, one that may prove negotiable, and that it constitutes a large step toward a situation much more favorable for the further design and negotiation of the conditions for a disarmed world. For instance, there will be much greater certainty of the numbers of weapons that remain to be disarmed.

In view of the fantastic dangers of a limitless arms race among an increasing number of nuclear nations, this would seem to be a far safer course for our nation to pursue as the primary goal of its foreign policy. If we are to pursue it effectively, we will have to make the difficult decision to accept military parity with the Soviet bloc, rather than to try to remain well ahead. This does not necessarily mean exactly equal numbers of long-range missiles, but it might mean this if other items of military strength are to be pared down accordingly, after due allowance for geographic differences.

It may, with a grain of truth, be claimed that we have already made the proposal of a region-by-region approach and of a transitional deterrent, and that the Soviets have failed to accept it. In an outline3 first submitted in the negotiations at Geneva on April 18, 1962, we proposed in a sketchy way three stages leading at the end to general and complete disarmament and therein suggested, without including it as an actual proposal, that the aim of establishing inspection in proportion to the amount of disarmament at each stage (Section G3c) "might be accomplished, for example, by an arrangement embodying such features as" the region-by-region procedure described above. The suggestion was not integrated with the transitional deterrent and the end stage of complete disarmament was alluded to so vaguely as to leave the suggestion no more than a trial balloon for Soviet reaction, which has not been favorable. Elsewhere in the negotiations it was made clear that we had in mind proportionate reductions in nuclear strength, to leave us a fixed numerical ratio of advantage over the Soviets as the numbers of missiles became smaller, rather than an approach to parity.

We have negotiated separately for the establishment of a lower-level deterrent, rather than working toward general and complete disarmament as the immediate goal, on the grounds that without some nuclear deterrent a few hidden nuclear weapons could be de-

cisive. It is a hopeful sign of progress in the slow negotiations that the Soviets have finally acceded to this concept in principle—at least since Gromyko's United Nations speech of September, 1962. They seek, however, to negotiate the final stage of complete disarmament in the same package.

A promising line of approach to the disarmament problem would be for us to propose a treaty providing in realistic detail regionby-region steps to a stabilized low-level transitional deterrent, incorporating a rapid approach to parity in both nuclear and conventional weapons (which means destroying more Soviet heavy tanks and short-range missiles and more of our long-range missiles as a modification of the first regional stages). This would be proposed with the sincere intention of using the breathing spell provided by the transitional deterrent for the development of international machinery for the maintenance of a stable peace in a world without national arms. It would be to the mutual advantage of the two nuclear giants, without favoring one over the other, and to the other countries of the world as well, because it would make the scourge of nuclear war less likely.

It would make war less likely, among other reasons, first, because there would be fewer weapons and weapons commanders to fire by mistake; second, there would be less pressure, on the part of national leaders under some provocation, to attack to exploit a supposed temporary advantage in rapid weapons de
(Continued on page 114)

David R. Inglis was a member of the Los Alamos team that developed the first atomic He has been associated with the bomb. Argonne National Laboratory since 1949. In addition, he was visiting professor at the University of California (Berkeley) in 1955-1956; in 1957–1958, he was a visiting scientist at CERN, the international physics laboratory in Geneva. In 1959-1960, Mr. Inglis was Chairman of the Federation of American Scientists. An early exponent of step-by-step disarmament and the idea of a nuclear test ban, he is author of numerous magazine articles.

³ Outline of Basic Provisions of a Treaty on General and Complete Disarmament in a Peaceful World; U. S. Arms Control and Disarmament Agency, Publication 4, General Series 3, May, 1962 (Washington, D. C.: U. S. Government Printing Office, 1962).

"World order requires not only total disarmament but also enforceable world law against international violence [such as] the experience of centuries has shown to be essential," says this commentator, in presenting his plan for the achievement of a genuine peace.

The Need for Total Disarmament Under Enforceable World Law

By GRENVILLE CLARK
Lawyer and Author

Y ALMOST UNIVERSAL agreement, the world's paramount problem is the achievement of peace, by which I mean genuine peace, as distinguished from the present precarious balance of terror. What we are discussing here is the question of method —that is to say, by what necessary means this objective of genuine peace can be achieved. Such a discussion is all-important since the cause of the world's failure to agree upon any adequate plan for peace is certainly not any lack of desire but rather a lack of sufficient understanding as to the principles upon which genuine peace must be based and as to the nature and structure of the world institutions indispensable to the end in view.

My proposition is a simple one, namely, that world order requires not only total disarmament but also enforceable world law against international violence, necessitating the same kind of legislative, executive and judicial institutions on a world scale as the experience of centuries has shown to be essential for the maintenance of internal order in local communities and within nations.

By all except the most ignorant, it is taken for granted that law and order in any community depend upon the existence of clearly stated laws against violence, upon reliable courts to interpret and apply these laws, and upon efficient police forces to deter or apprehend violators thereof. Moreover, every orderly community takes it for granted that no armed factions can be permitted. For, while the possession by individual citizens of rifles, shotguns and pistols for purposes of sport or self-protection may be permitted, who would suppose that the existence within a community of organized and potentially hostile armed bands would be compatible with domestic peace?

In short, we have learned by long experience that the maintenance of domestic order within any organized society, up to and including the nation, requires not only disarmament but also legislative, executive and judicial institutions to enact and enforce definite law against violence. And until the obvious truth is generally accepted that world order requires corresponding world institutions, there is indeed no chance for any reliable peace on our planet.

Assuming acceptance of this concept that enforceable world law is indispensable, what are the specific requirements to that end?

I submit that nothing less is needed than a comprehensive plan including the following elements:

1. Universal and complete disarmament. By this is meant not merely arms control or the mere reduction of armaments, but rather the elimination of all national armaments by

every country in the world without exception, right down to the level of agreed upon police forces for internal order only, strictly limited in number and very lightly armed—it being understood that this total national disarmament must be subject at all stages to as effective an inspection system as is reasonably possible and that the accomplishment of each stage must be carefully verified before going further.

- 2. An adequate world police force, meaning the establishment, parallel with the disarmament process, of a strong and heavily armed force of, say, 300,000 men, composed of individual volunteers and not of national contingents, with careful safeguards against having any undue proportion from any nation or group of nations, and in respect of command, disposition and other factors, so as to provide every possible assurance against abuse of power by this force.
- 3. A world judicial, quasi-judicial and conciliation system, under which impartial world tribunals would be constituted in order to provide fully adequate means for the peaceful settlement of all international disputes, in lieu of force or the threat of it.
- 4. World legislative and executive agencies, so constituted as to be fair to all nations and also workable in practice, the powers of these agencies to be carefully restricted to the end in view, namely the prevention of war.
- 5. A world development authority, adequately financed and staffed, to mitigate the vast and excessive economic disparities between the "have" and the "have-not" nations.
- 6. An effective world revenue system to provide reliable revenues for the maintenance of the world police force and other necessary world institutions, since without such a system the mere establishment of these institutions would be a futility.

I cannot emphasize too strongly that every one of these elements is essential. For example, disarmament alone, no matter how complete or how efficient the inspection system, could not ensure peace for the reason that many pressures for change and many international disputes would still continue, with consequent rearming and fighting, unless such reactions were prevented by a strong world police and trustworthy world tribunals. It is indeed no more sensible to expect world order without *all* these world institutions than it would be to expect a watch to keep time without all its essential and interrelated parts.

Why is total national disarmament essential, as compared with merely partial disarmament or so-called arms control? To my mind the answer lies in simple arithmetic applied to the vast existing and prospective stockpiles of nuclear weapons and their destructive power. President Lyndon B. Johnson told us on January 21, 1964, that the Soviet Union and the United States "already have produced enough explosive force to equal ten tons of TNT for every man, woman, and child on the face of this earth"; and, since the world's 1964 population is about 3.2 billion, this means the equivalent of 32 billion tons of TNT. Some other estimates are far higher; but I prefer to take this conservative figure cited by the President.

As to the killing capacity of this almost incredible explosive power, we may well start with the Hiroshima bomb of August 6, 1945. Although strictly accurate figures as to the loss of life from that bomb are lacking, careful inquiry both in Washington and in Japan indicates that there were approximately 80,000 fatalities from this first crude bomb which, according to official announcement, had an explosive power equivalent to about 20 thousand tons of TNT. In other words, the killing rate was approximately four deaths per ton of explosive power.

It follows, therefore, that at this Hiroshima rate the killing capacity of the estimated 32 billion tons of nuclear explosive power held by the United States and the Soviet Union would be 128 billion people, or 40 times the 1964 population of the world. Even if one assumes that in a nuclear war the killing rate per ton would be only one-fourth of that of the Hiroshima bomb (i. e., one person per ton), these 32 billion tons would be sufficient to kill 32 billion people, or ten times the world's population. And even if one further assumes that, at a killing rate of one person per ton, only one-tenth of the Soviet-American stockpile was to be used, or 3.2 billion

tons, this would still be enough to kill every inhabitant of the world.

We should remember also that even in an all-out nuclear war a large part of the world's population would in all probability escape direct attack, since there would be no point in the wanton destruction of the people of such countries as India, Indonesia, Nigeria and Brazil which would presumably stand aside from the struggle of the nuclear powers.

Another important consideration is that the so-called means of delivery of the vast stocks of nuclear weapons are constantly being increased and perfected. The test ban treaty of August, 1963, did not prohibit underground testing, which still goes on in the United States and presumably in Russia, so that the "yield-to-weight" ratio is constantly being "improved."

Moreover, the installation of intercontinental missile sites constantly proceeds, so that, according to the statement of the United States delegate at Geneva in February, 1964, the United States will have 750 per cent more strategic missiles by 1965 than when the current disarmament conference began in March, 1962. And, while it is generally believed that in 1964 the United States has a superiority over the Soviet Union of as much as three-toone, both in the quantity of nuclear weapons and in the means of "delivering" them, there is little doubt that the fewer armaments of the Soviet Union would still be amply sufficient to kill at least 200 million people in densely populated Western Europe and Britain and, say, 100 million in the United States and Canada. This latter estimate is supported by President Johnson's statement on March 24, 1964, that while "in a matter of moments" the United States "can wipe out from 50 to 100 million of our adversaries" they, on the other hand, could kill "half of our population in a matter of an hour."

Having all these factors in mind, it seems apparent that even if there were a reduction of as much as 90 per cent in the nuclear armaments of 1964, the remaining 10 per cent would still be sufficient to constitute a grave threat which would prevent any real feeling of security.

I believe, therefore, that the reason why any serious consideration has been given to the mere reduction of armaments, as compared with "general and complete" national disarmament, is simply that hardly anyone has taken the trouble to apply simple arithmetic to the question of nuclear disarmament. For it is clear as crystal than even a 90 per cent reduction in nuclear armaments would be insufficient to remove the danger inherent in these appalling weapons.

It seems plain, therefore, that nothing less will suffice than total nuclear disarmament, save only for a small quantity of nuclear weapons which would probably need to be held by the world peace-keeping organization as a safeguard against any possible major revolt against its authority. It is clear also that universal and complete nuclear disarmament is out of the question unless "conventional" national armaments are simultaneously eliminated. And hence it follows that the only practical solution is the abolition of all national armaments, without prejudice to the maintenance of strictly limited and lightly armed police forces for internal order only.

Just as the necessity for total, rather than merely partial, national disarmament is apparent, it is equally clear that along with such disarmament there must be an effective alternative system for the settlement of all international disputes without violence or the threat of it. As already noted, everyone takes it for granted that the price of internal peace in local community, state and nation is a reliable system of enforceable law under which there are legislatures to enact specific laws against violence, police to apprehend and deter violators, and courts to interpret and apply the laws. Until the great majority of people learn the simple truth that in order to preserve peace between nations corresponding world institutions are equally essential, any hopes for genuine peace will indeed be futile. It is for this reason that adequate machinery for the enforcement of world law in the limited field of war prevention must be established simultaneously with the process of total disarmament.

This does not mean that under existing con-

ditions armaments can be summarily dispensed with since, in our present anarchic world, they may well serve a useful purpose in temporarily deterring violence while a true solution is sought. But it does mean that the indefinite maintenance of vast armaments is in itself no solution at all and at best can do no more than provide time to work out the only real remedy, which must consist of the total elimination of national armaments under a system of enforceable world law.

The powerful vested interests and traditional modes of thought which must be overcome in the effort for genuine peace are only too apparent; and yet two formidable influences are at work in this effort. One is, of course, the ever-present risk of catastrophe inherent in the arms race. The other is the interrelationship between success in the "war against poverty" and a termination of the arms race.

In the modern world the gap in living standards between the "have" and "have-not" nations tends to widen rather than to contract—with ominous consequences for all concerned. At last, however, it is beginning to be understood that the immense cost of armaments, at some \$120 billion per annum, constitutes an almost insuperable handicap to the relief of world poverty.

Even in our own country we begin to see that the new and badly needed "war against poverty" will be seriously hindered by the immense diversion of materials and energy from productive purposes which is involved in the continued piling up of armaments. As President Johnson said on April 11, 1964, there are still 20 per cent of our people (over 38 million) who are "ill-fed, ill-clad, and ill-housed"; and it will become steadily more apparent that adequate provision for their needs is incompatible with our vast military expenditure.

These influences will, I believe, persist and grow as the years pass and will offer encouragement to the workers for genuine peace.

Nevertheless, it must be realized that a truly revolutionary change in the world's thinking is a precondition for the achievement of world order under world law, and that the issue as to whether this change will occur in time to forestall a world holocaust is still in doubt. In his later years even as wise and great a man as Albert Einstein seemed to doubt the outcome when he said: "Our world faces a crisis as yet unperceived by those possessing the power to make great decisions for good or evil. The unleashed power of the atom has changed everything save our modes of thinking, and thus we drift to unparalleled catastrophe."

For my part, I am somewhat more optimistic, believing, as I do, that there will be enough intelligence in the younger generation to perceive what is required and to force the governments, tardily indeed and yet just in time, to agree upon the necessary comprehensive plan.

The outcome will mainly depend, I believe, upon the development of careful and systematic education in regard to the essentials for a warless world. This education must relate not only to the reasons why effective world law in the field of war prevention is essential but, equally or more important, to the kind of world institutions—legislative, executive and judicial—which must be established in order to make enforceable world law a reality. In other words, the peoples must understand not only why the new and radical treatment is required; they must also comprehend the methods and techniques whereby the new system of world order can be administered.

This worldwide process of education must be based upon study and discussion at all levels starting with the high school student, and with the aid of suitable materials and (Continued on page 115)

Grenville Clark, a New York lawyer for many years, has long devoted himself to matters of public concern, and especially to the problem of world peace through world law. In addition to numerous magazine articles, he has written A Plan for Peace (New York: Harper, 1950) and, with Louis B. Sohn, World Peace through World Law (2nd revised ed.; Cambridge: Harvard University Press, 1960).

"The establishment of a full-fledged Parliament of Man in a Federation of the World will not... be something radically new; it will simply be the final stage in a political evolution which has been a central feature in man's story."

The Case for International Control of Weapons

By Vernon Nash Author and Lecturer

hould the United States yield control of its weapons to an international organization? Yes. Existence under a balance of terror has been common in man's history. Humanity's further tolerance of exceedingly precarious living would not be surprising if the fundamental nature of war had changed only gradually in our time. But we face a rapidly mounting peril beyond normal imagining. Precise description of war now requires a new jargon intelligible only to experts.

In their original senses such words as fearful, dreadful, terrible, horrible, frightful, appalling and awful adequately describe our weapons. But the impact of such words has been virtually lost by their wide use as terms of extravagant hyperbole.

The lack of popularly understandable language causes much use of arresting metaphors in discussions of war's potential death and destruction. Thus, John Strachey in his book, On the Prevention of War, suggests that the human race now awaits execution in a condemned cell. "Our dilemma," says the former British War Minister, "is that war, while inevitable as long as the world is organized as it is, has become intolerable."

President Lyndon B. Johnson in an otherwise superb statement on foreign policy to a meeting of labor leaders March 24, 1964, asserted: "War has become impossible." That,

tragically, is just what it is not. If war is out of the question, why should the world be spending well over \$100 billion a year in frenetic arming? Presumably, in context, the President was saying colloquially that war is preposterous, monstrously irrational; that it is insupportable or, as so many are now saying, it is unthinkable.

A threefold compulsion is upon us to work out dependable international controls over our facilities for waging war: (1) the near certainty of war under existing conditions, (2) the horrendous nature of modern weaponry, and (3) our lack of defense against the worst of these armaments. The third of these affirmations requires elaboration.

Tacit admission of an inability to defend a nation from devastating attacks represents a complete shift in military emphasis. The almost universal avoidance today of the once most favored term of the militarists—preparedness—is meaningful. Whatever the values of mutual deterrence may be for keeping the peace, deterrence is no defense if war does come. Similarly significant is the virtual abandonment of civil defense programs: backyard dugouts and weathered signs for evacuation routes in our metropolitan centers have become grim jokes. The very title of the Defense Department is itself a mockery.

A third world war fought with man's full potential would at the least end our present

civilization; it might exterminate the human race. Yet one looks in vain for any break in an apathy which could be the prelude to Doomsday. Does extreme fear produce social as well as individual paralysis, or a kind of collective hysterical blindness? How else shall we explain continued passivity?

Pushing the ghastly threat of war into the subconscious may be plausibly explained by feelings of helplessness or acute pessimism. However, either attitude is an inexcusable default on our "humanhood." Most persons less than a century ago were dogmatically defeatist about the prospects for ending institutionalized witchcraft, chattel slavery, the divine right of kings, the subjugation of women, and exploitative child labor. And they were mistaken!

Yet the concerned are frequently told, "I just don't let myself think about our possible fate." Herman Kahn's book, On Thermonuclear War, produced widespread comment so similar as to lead the author swiftly to write another volume, Thinking About the Unthinkable. It seems clear that most of us are unable to actualize multidigit figures; it is even harder to feel tragedy beyond our direct experience, especially if it is merely predicted.

A single insensate death late in 1963 plunged multitudes into a period of shock, shame and grief. In contrast, little notice had been taken not long before when President Kennedy warned in an official message that at least 300 million persons would die in the first hour of a nuclear war.

Our national disgrace last year was intensified by the murder of the President's presumed assassin. How many ever have noted that the methods used in these domestic horrors resemble the salient aspects of our international relations? The Evening Bulletin of Providence, Rhode Island, headed its editorial of November 27, 1963, thus: "Peace at Home and Abroad Cannot Survive Anarchy."

DANGER OF NATIONAL SOVEREIGNTY

Mass violence is the accepted last resort in international disputes. Absolute national sovereignty sanctions the right of a people to

take the law of nations into its own hands whenever it is convinced that its own self-interest requires such action. No satanic power could devise a more hellish set of twins as bases for social or individual action.

Nevertheless, able thoughtful leaders of consequence in both official and private life still maintain that we have no choice but to continue to exalt the absoluteness of a nation's sovereignty. Here is but the latest instance of a phenomenon long noted by philosophers: mankind has always found it most difficult to realize that a sufficiently basic change has taken place in his environment to cause him to make conscious and deliberate adaptations to the altered circumstances.

Foremost perhaps, among the scholarly apologists for the primacy of nationalism is Henry A. Kissinger of Harvard University. In his much praised book, *Nuclear Weapons and Foreign Policy*, he writes about "the chimera of international controls." Only the "fuzzies" who indulge in foolish fantasies, in other words, could possibly urge us to strive for an early end to international lawlessness.

In contradiction to this all-too-easily accepted fallacy stand the magnificent files of the Bulletin of the Atomic Scientists. Ralph E. Lapp, a top-ranking nuclear physicist, writes: "... the only shelter, the only defense in which man can find any enduring hope, is disarmament." Edward Teller, who is slandered as being so hard-headed as to be callous, affirms in his Legacy of Hiroshima: "... preparedness can buy us nothing but time. We must use this time to establish a lawful and prosperous community of nations. Our ultimate goal can be nothing less than world government."

Herman Kahn has sought realism so successfully that he has been libeled by many as unconscionable, a nuclear warmonger. Yet this "hard-nosed" expert, probably the most respected and widely read by military personnel among civilian authorities, declares in his *Thinking About the Unthinkable*:

There is a well-known book on possible constitutional forms for world government, World Peace Through World Law [by Grenville Clark and

Louis B. Sohn].... Though I have some serious reservations about the proposals set forth in this book, I would prefer taking my chances with them than with an uncontrolled, interminable arms race.

MOUNTING PERIL

The dangers will mount geometrically with each new member of the "nuclear club." Suitcase bombs may prove attractive to lands lacking delivery systems, thus producing the danger of anonymous attacks which could "trigger off" a general war. In the opinion of United States Ambassador to the United Nations Adlai Stevenson "... the rationale of separate, disparate sovereignty has all but vanished." Without a world supergovernment, declared Sir Winston Churchill in 1950, "the prospects for peace and human progress are dark and doubtful."

Dr. Kissinger writes (in what would seem to be the gravamen of his argument) that it is unrealistic "to expect sovereign nations, whose failure to agree on issues of much less importance has brought about the arms race, to be able to agree on giving up their sovereignty." Against this contention, the late John von Neuman, member of the Atomic Energy Commission, 1954–1957, observed: "All our experience shows that even smaller technological changes than those now in the cards profoundly change political and social relationships."

Von Neuman also emphasized the fact that it is precisely in times like ours that the future is most unpredictable. "We are moving today," says Kahn, "amid vast uncertainties." The Kissinger argument can in any reasoned case be turned inside out. Our attempts to deal separately with many closely related and vitally interdependent factors is the central cause of our recurrent failures. The geographic unit which our planet has become must be made a political unit, or success will elude us to the end of time.

Man has not always had to pass through a cataclysm before doing what was required. Hence we may justifiably hope that control of war-making facilities will be allocated to a basically revised United Nations in time to avoid an Armageddon whose fearsomeness

can hardly be exaggerated. One physical world compellingly requires one political world.

Many seem to be lulled by relatively low estimates of losses in a future war. It is not noted that all the more "optimistic" guesses presuppose that a preponderant majority of us will find protection against blast, firestorm and fallout. Yet no serious attempt whatever is under way to provide adequate shelters for any appreciable number. Tens of millions of us have thus become expendable, as is shown by the gruesome extension in military usage of the terms "acceptable" and "unacceptable" losses. This lack of refuge against a hell on earth is an impeachable offense if it is possible to provide safety for all of us. Official behavior clearly indicates the authoritative judgment that this is not possible.

DIFFICULTIES OF SHELTERS

Further, even if some exceedingly expensive burrows would save their occupants, we might as well have no shelters in congested areas as to have an insufficient number of them. If relatively few exist, every known shelter at the first alarm would be the stage for a danse macabre by panic-stricken hordes. Each location would swiftly become a most dangerous place rather than a haven of refuge.

At considerable distances from nuclear strikes in thinly settled regions, bunkers in basements and cyclone cellars would serve. All shelters in target areas must be well underground, be shock-resistant, and be entirely self-sufficient for varying periods. They must be shut off completely from the outside world for some time, and must be invulnerable to assault from those unable to gain admittance. It would probably be necessary later in most cases for the occupants to be able to dig their way out through thick piles of rubble.

Since ventilators would themselves be deathdealing during firestorms and lethal fallouts, persons in urban shelters would need oxygen from tanks during the sealed-up periods. Where is this to be obtained? The total annual production of oxygen in the United States at present would last for such use less than a week for a single city of 200,000, a little more than one-tenth of one per cent of our population. Enormous quantities of certain chemicals would also be required to absorb exhaled carbon dioxide in the unventilated periods. Also, during such periods, the rise in temperature from body heat might prove serious. Assured use of some appliances would require electric power plants in each shelter.

Baffling perplexities mount as the shelter problem is contemplated in its entirety. Yet the issue is crucial since the survival of a nation in any meaningful sense would require adequate civil defense provisions should the country suffer full-scale bombing attacks. The ability of any people to restore a viable social order with enough promptness would depend to a major extent upon the relative number of sane and healthy survivors.

A few physical difficulties are insuperable under present conditions. If slow-decaying radioactive materials were present in a heavy fallout, inhabitants of all such areas would need to stay entombed indefinitely. No space sufficiently protected against contamination could hold the food, water and other supplies for its quota of persons for many weeks, perhaps months. No effective filters exist for many known chemical and biological weapons.

No wonder Congress, state legislatures and city councils are balky! What is still being called civil defense is merely provision for disaster corps. These are desirable at all times but would mean little in nuclear holocausts; the civil defense workers would themselves be victims. The only defense against war now is to prevent it. Hence, many obviously have concluded that we will do so.

Others are not convinced. Herman Kahn asserts that a veritable "Doomsday Machine" is practicable. Ralph Lapp subtitles his book, Kill and Overkill, with the phrase, "The Strategy of Annihilation." A single 20-megaton bomb would completely destroy a fairly large city. The world now has "in stock" more than 50,000 times the amount of fire-power used in the whole of World War II, and the insane race to produce more and ever more H-bombs goes on. Nor is any popular

revulsion against this madness discernible anywhere. Presumably it is assumed that we have reached stalemate, and therefore will escape wars of any major consequence.

Even if this should be true, the outlook is still ominous, unless we can stop putting a substantial portion of our gross national product into unproductive military establishments. Is anything more anomalous than that a people with our resource and resources should have such a sluggish economy with permanent, mounting unemployment and with our American dollar recurrently unstable in international exchange?

It is altogether probable that we cannot, or will not, fully tackle our disgraceful poverty at home, nor do what is so urgent in aid of other peoples, until we get out from under the armaments burden. Yet the legitimate aspirations of the depressed two-thirds of humanity everywhere must be fulfilled without too great delay or global disaster will likely ensue even if we have no major war.

Many are soothed by the realization that we have muddled through so many years of the atomic age without nuclear war. We should, instead, be haunted by Bertrand Russell's one-sentence history of the human race: "Since Adam and Eve ate the apple, man has never refrained from any folly of which he was capable." It is not easy to reject that cynicism so long as humanity continues to tolerate threatened bankruptcy from the criminal idiocy of making weapons we do not want to use, dare not use, indeed cannot use without reducing to irreparable ruin the global homestead of mankind.

A unique element in human experience is that today, the stronger nations become, the less secure they feel. There is solid justification for this paradox but frustrations arising from it are transmuted by large numbers into extreme attitudes. So some proclaim loudly "Better Dead Than Red" as if we had no other option. Fanaticisms of this type once prevailed among religions; intransigeance between Catholics and Protestants in the Thirty Years War turned the whole of Central Europe into a shambles.

Certain easings of tension are based on

valid grounds. Thus, danger of a so-called preventive war has diminished greatly. A preemptive strike depends upon surprise and the "satellite spies" on each side would now promptly spot any unusual preparations without which attacks cannot be launched. Even such improvements in the world situation have elements of danger when they become cited as reasons to relax.

Present and projected reductions in armament, even without international agreements, indicate some optimism among statesmen. In some cases, these cancellations of projects on which we have been spending billions are made in complete confidence that certain weapons and facilities will not be needed or will not be usable. Yet the wild outcry by officials at all levels in the United States against small cutbacks in the Department of Defense demonstrated that President Dwight Eisenhower in his farewell message should have warned us against a "triple threat." The vested interest in preparing for war is not merely a military-industrial complex. Both tycoons and the "brass" have powerful allies among the bureaucrats.

To many Americans, it is the height of optimism even to suggest that the future is uncertain; they see only humiliation or holocaust. If it is the latter, then we must settle for nothing less than "victory," as if anyone ever "won a fire," as General H. H. ("Hap") Arnold used to say. Cassandras who scoff at the idea that the leaders of Red China will ever become convinced that war is no longer a usable instrument of national policy, should be reminded constantly that they were saying the same thing about the Kremlin only yesterday.

WORLD GOVERNMENT

Explicit recognition of what must be done is the final argument to most articulate opponents of a world of order under law. Any "international organization" with authority and power to control the weapons of war is readily, and correctly, perceived by them to be, in precise language, a world government. They then jump to the unwarranted conclu-

sion that such a body would be, or would swiftly become, a tyrannical superstate.

Powerful safeguards against abuses and usurpations of power are available, and no nation will or should enter a world federation unless these precautions are incorporated in its constitution. The danger, though real, is negligible in comparison with the peril continuously present in a world of power politics. Moreover, there has never been a risk-free course open to human beings nor can there ever be. The strengthening of mind and spirit by the meeting of crucial tests is among the most precious elements in our heritage as men. It is ironic that so many who rail against chancing any danger in civilian relationships, such as cooperation with other peoples, are among the vociferous glorifiers of heroism in war.

False apprehensions are created by influential leaders who not only observe that absolute national sovereignty is outmoded but also stress the erroneous deduction that the nationstate itself is thereby made obsolete. Such a non sequitur would have been understandable less than two centuries ago. We now know from long experience in our own and other federal systems that it is acceptable and practicable to assign certain powers to one level or type of government and to withhold other forms of authority. Such dual sovereignty is the distinctive element in federalism. We even use the principle at local levels in most of the United States as we separate responsibility for education from other aspects of municipal or county governments.

Agreement on just how much power, if any beyond weapons control, we shall need to give to a world federation at the start can only be worked out in some sufficiently representative constituent assembly. The "watershed" principle which should be determinative is this: Does the nature of a political relationship vitally affect the safety, well-being and human dignity of all men. If so, then only an agency representative of all has a moral right to regulate it. By this criterion an unchallengable control of all war-making facilities must be included within the powers assigned to a Commonwealth of Man, how-

ever limited or however extensive they may be otherwise.

Our proposal as the formulation stands could be understood by the thoughtless to mean that the United States should surrender control of its weapons without regard to the behavior of other lands. Since "unilateralist" has almost become an epithet we should perhaps note that the phrase, "international organization," presupposes a cooperative undertaking. Our nation standing alone can and should officially declare an eager readiness to join with other willing nations in such disarmament. Another form of legitimate unilateralism would be for us as a people, and formally through our government, to urge persistently that other nations help us inaugurate so glorious a change in our international relationships.

We have always had wars, as so many are wont to chant. A paralleling fact of equal significance is that the extent of territory within which *internal* peace has normally been maintained has been progressively enlarged through human history. This improving development has been brought about by formation of clans out of patriarchal family systems, of tribes out of clans, of little kingdoms out of tribes, and of modern nations out of smaller principalities and city-states.

The common governments in each era which successfully kept the peace within their borders were not restricted in their authority to weapons control and provision for the common defense. The establishment of a full-fledged Parliament of Man in a Federation of the World will not therefore be something radically new; it will be simply the final stage in a political evolution which has been a central feature in man's story.

Only a few years ago polarization into giant power blocs was generally believed to be an insurmountable obstacle to world unity. Today, nothing approximating monolithic structures can be found on either side. Major attention has been given by us to the Sino-Russian schism so disruptive to world communism. Quite as portentious are a moribund Nato and a still-born Seato. Alliances, even more than leagues, have been unde-

pendable and short-lived; for peoples in close contact and with acute conflicts of interest there is no tenable alternative to common government.

One rarely meets any more a flat denial of the desirability of a governed world. Negativism takes the form, in general, of assertions that we should not even try to get any such thing at present because our efforts would be doomed to futility. Much emphasis is placed on an alleged certainty that other peoples will not be willing; they in turn cite the absence of any appreciable demand by us for an end to the war-system as justification for their own pessimism and do-nothingism. Precious time is thus unnecessarily wasted as everybody waits for everyone else.

Most persons in each country want some sign from their governments that such a reform is "in the cards"; politicians insist that a trustworthy internationalism is out of the question until the people clearly are "ready for it." Few leaders ever note that statesmanship is the art of the seemingly impossible; politicians in general are obviously little more than drummajors wielding batons. The impasse can only be broken from the grass-roots up by insistent advocacy in sufficient volume to form a "parade."

If this be true, then Ralph Lapp's comment is apposite: "The strangest aspect of our perilous times is the ominous quiet. Probably never in history has the human race looked so much like sheep marching silently to slaughter." Not all the "brats" who plague our neighborhood-world are offspring of the marriage of miracle-working science with

(Continued on page 115)

Vernon Nash has long been involved in the organized movement for a world government. He was one of the founders of the United World Federalists and has also served as Field Representative for the U.S. Committee for a World Constitutional Convention. His speaking engagements on this subject number in the thousands. A frequent contributor to periodicals, he also wrote the book, *The World Must Be Governed* (New York: Harper, 1949).

"The picture of a disarmed, centrally governed world is intolerably romantic," writes this specialist, adding, "To expect the world as a whole to achieve more success than Nato is to ignore all lessons of history and human experience."

The Case Against International Control of Weapons

By WILLIAM R. KINTNER Deputy Director, Foreign Policy Research Institute, University of Pennsylvania

HERE ARE THOSE among us who contend that if all nuclear arms now in the possession of nation-states were turned over to an international body (presumably the United Nations), a world government would be created strong enough to enforce its will and maintain peace. Such a proposal stands in direct opposition to the view that "A fundamental political tension cannot be appeased by inviting the antagonists to enact constitutional norms for their future relations."1

Increasingly, many people confronted by the nuclear arms race have found the proposal for a world nuclear force attractive, despite the fact that historical evidence points out that in other eras such schemes have been rejected as politically unrealistic and utopian. "But with present political forces basically in conflict over the inheritance of the earth itself and supported by violently contrasting ideologies, such planning cannot legitimately assume short-term prospects."2 The details of central political control of major weapons have never been precisely stated; in fact such proposals are marked by vague and idealistic The question of feasibility is generalities. Realistic consideration of this issue

eign Policy (Boston: Little, Brown, 1960), p. 49.

must recognize that the scheme for "immediate general and complete disarmament" was introduced by Soviet Premier Nikita Khrushchev in September, 1959, at the United Nations as a propaganda gambit. Unfortunately, belief in this will-o'-wisp has added a note of unreality to the already staggeringly complex subjects being negotiated at Geneva.

Under the proposed arrangement the need for national defense would presumably disappear and national forces would serve only to protect internal security. Control of all nuclear weapons by a world authority would represent a radical transformation of the existing political scene. It would be a far greater step from the present United Nations to such a world body than from the nineteenth century framework to the present United Nations Charter. This transformation would involve fundamental changes in the political and institutional aspects of the United Nations as well as in its ideology. The United Nations was not designed for a disarmed world but, on the contrary, for one in which the major powers retained their arms. Before taking this leap toward a world state, it is fair to ask whether a broad enough community of interests exists to provide the necessary foundation for a world order.

The difficulty with proposals of the "transform-the-United Nations-type" is that what-

¹ Charles de Visscher, Theory and Reality in Public International Law (Princeton: Princeton University Press, 1957), p. 108.

² Lincoln P. Bloomfield, The U.N. and U.S. For-

ever their detailed form, they seek to subordinate the largest powers, which can most effectively employ their economic and military strength to pursue their policy objectives, to some weighted majority vote of other states. This majority, in turn, would direct and enforce the provisions of the disarmament agreement even against the open opposition of one of the superpowers.

The basic assumption underlying this system is that all nations have an overriding common interest in avoiding the destructiveness of nuclear war, which compels them to accept decisions otherwise wholly unpalatable. Could the use of force by the international organization be limited to the essential functions of maintaining peace and policing compliance with the disarmament agreement? If so, would disarmament and world peace be policed by majority votes in intergovernment bodies without regard to the political disputes and conflicting national goals that disarmament could not eliminate?

SUPPORT OF THE STATUS QUO

A solution of this kind would confine the international organization to support of the status quo. All nations are not willing to accept the status quo and some will try to change it by whatever means are most appropriate. The problems of peace in a dynamic world of competing national aspirations and basically divisive political issues cannot be overcome by a formula sanctifying the status quo. In fact,

A plan for the rule of law must provide for some accepted method of changing the law and enforcing it as it changes. The feasibility of this in the international as in the national community turns on whether there exists a modicum of common ethical connections as to the basic principles of decency between man and man. But are not some of the main war-provoking cleavages of today rooted precisely in the bitter divergencies of ethical connection, deeply entangled with conflicts of interests?³

The national representatives composing the central nuclear authority must decide the merits of international disputes, not on the basis of national aspirations but chiefly in the interests of the global directors' views of world peace. Will each balance the interest of his nation against those of the "world" community, much as a United States senator evaluates the state and national interests in his decision? A sense of world community must exist if both interests are to be treated fairly.

POSSIBLE TYRANNY

Consideration must be given, by those who cherish the integrity of the individual and compatible political institutions, to the Aristotelian dilemma of corruption of government into tyranny. Once the individual nations relinquish their vital powers to a central nuclear authority, the guarantee of national and individual rights is jeopardized. frustration of tyranny will depend not upon the formal provisions of established supernational institutions but on the quality and breadth of agreement underlying them. A community which is a product of rule by overwhelming force could disintegrate into an Orwellian nightmare. Strong national governments, regional grouping and the world organization share the burden of, in effect, "policing" of international disputes. crisis were to paralyze the world government there would be no alternative to global anarchy.

The potential abuse of power by such a world group is magnified by the absolute nature of the force at its disposal: total nuclear monopoly. For the central authority the question is: Who watches the watchmen? The regulation and supervision of such an authority is complicated by the insurmountable obstacle of incorporating into such a system the Communist doctrinal urge to fulfill a historical mandate of world-domination (whether by the "peaceful" economic and material means proclaimed by Premier Khrushchev or by Chairman Mao Tse-tung's more militant ways). For communism, there is no genuine accord which would bar its pursuit of this order. There may be areas that the Communists would agree to place outside the normal boundaries of East-West conflict as too dangerous. But what of the

³ Julius Stone, "Law Force and Survival," Foreign Affairs, July, 1961.

long-run? Either the Communists win (we would obey the rules) or, if they were getting relatively weaker, the Communists could resort to other more direct means, i.e., military buildup.

Fundamental to an arms control proposal is the matter of reliability. A closed totalitarian state with its penchant for extreme secrecy facilitates a strategy of evasion to outwit any system of verification. Yet, lesser steps might be taken on disarmament measures without this radical transformation of present political conditions.

LACK OF CONSENSUS

To institute a world system of atomic arms monopoly requires as a corollory the erection of a "world government" based on supernational institutions of government, requiring mandatory universal membership. Thus, a preponderance of political-military power would be vested in the hands of a centralized authority. Such a supernational organization, even if an extension of the present United Nations, would have to be given the essential powers of a central government.

There is no theoretical reason why the United Nations could not be transformed by extensive charter modification to achieve effective global control. The essential issue is not the formal aspect, but that of the transfer of sovereign power from the states to a supernational government. If the loss of military power by individual states is desirable, the details will not be insurmountable. The negotiations between the East and West, however, have consistently failed because of the reluctance of the parties to yield even a minimal measure of their sovereignty.

Community-building at any level demands a consensus as to the general rules and overall values of the system. Upon such a consensus, the edifices of government and ultimately law can be erected. Technology urges us to accelerate the process of bringing larger areas into political communities. Yet, with respect to a global order, nothing in technology has shown itself capable of altering the basic East-West conflict equation. In virtually every world issue the legacies of the past fail

to be substantially erased by technological progress.

An underlying assumption of those who advocate a world order is that national governments represent obsolete vested interests while the true aspiration of "peoples everywhere" is for a community based on the "brotherhood of man." If this were really true, the problem could be solved by eliminating national governments. But on closer inspection, underlying national attitudes also thwart the achievement of this noble dream. In most cases, governments are an institutional reflection of the economic, political and social commitments of the people who comprise each nation.

The raising and provisioning of armed forces, the declaration and waging of war and the unhampered research, development and production of military material would become the duty of the international state. The control of nuclear weapons requires an elaborate communications network, an unprecedented degree of international military and economic organization, and responsible political control in order that such a force would be available when called upon.

TECHNICAL OBSTACLES

Certain technical obstacles stand in the way of creating a global monopoly of force. We must not ignore the fact that in modern technology the line between the "civilian" and the "military" is rapidly losing its definition. Similarly, developments in biological and chemical agents and the ever increasing military implications of projects carried on under the guise of "basic physical research" pose a staggering problem to the resolution of the issues of inspection, policing and diversion.

Safeguards must be provided against the abuse of power by the central guardians and against the possible infringement by military or political groups against the central government. Would the central authority, recognizing that its power was the decisive factor in world affairs, exercise this power divorced from competing policy objectives? Would it have to assume responsibility for protecting

or advancing some of the national interests which were once the responsibility of individual nations through the use of the instrumentalities of national power? Would the political balance of interests within the central authority lead to some efforts radically to alter the inequalities of the world's wealth? As Soviet spokesman S. K. Tsarapkin said at Geneva:

When we speak of controlling one another, there is no question of impartiality; partiality is of the essence. . . . To see that another power does not violate the treaty or secure a military advantage . . . means, of course, to be in the highest control.

Verification via inspection depends on the availability of impartial personnel which would lead to a mixed staff, including nationals of neutral countries. But nationals of neutral countries who are competent to act as international civil servants or as representatives of their governments may be difficult to find. A common assumption is that the fate of verification depends entirely on whether the parties comply with the agreed disarmament limitations. In fact, if the parties disagree about the verification process, important difficulties may arise without clear evidence of a violation to frustrate the verification system. Interference may be difficult to prove and an aggrieved nation may have no recourse if there is evidence of interference with the verification system only and not of a substantive violation.

If any state were to take the step of violating the treaty and to start a series of nuclear explosions, such a state would, of course, never allow any inspection team to enter its territory.

Since the preponderance of military power under the central authority would be in the form of atomic weapons, an "effective" police force would rest on a doctrine of "massive retaliation." Unless the central authority could make credible its willingness to use this force, all kinds of mischief could be made by aggressive powers. The prospect of vast devastation as the only available response to assaults on the integrity of the sys-

tem is obviously a basic flaw. Thus, a world force might present a greater danger to humanity than the threat of "escalation" of national forces. The effect of this "either/or" option on the deliberative body in a crisis would probably be one of paralysis. The failure of the United Nations body to enforce its writ would undermine the whole system. The questions of credibility, of threat, and rigidity of both doctrine and means combine to cast grave doubt on the political and military value of such a scheme.

The very logic of "effective control" leads inescapably to the hypothesis that the central authority must have both conventional forces and nuclear force sufficient to deter any clandestine buildup. Yet the possibility of having this system outflanked (and thereby made ineffective) by future secret developments would pose anew the problem of deterrence in a different calculus than for individual states. The distortion of basic power-realities would create an atmosphere infinitely more volatile than the present power-proportional national alignments.

PROBLEM OF REPRESENTATION

The governing apparatus for the world nuclear force would necessarily possess executive, legislative and judicial powers. This would pose immense problems of equitable representation of nations and peoples. The (Continued on page 116)

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⁴ S. K. Tsarapkin, at the U. N. Plenary Conference on the Discontinuance of Nuclear Weapons Tests, February 23, 1959.

CURRENT DOCUMENTS

The Gomulka Proposals

On March 5, 1964, the Government of the Polish People's Republic made public a Memorandum suggesting the freezing of nuclear arms in Central Europe. The complete text of this Memorandum follows:

The Government of the Polish People's Republic has already on numerous occasions manifested its consistent desire in the search for solutions aimed at bringing about international détente and disarmament and lent its support to all constructive proposals designed to achieve this end. The reduction of international tension and creation of conditions of security in Central Europe have always been and continue to be matters of particular concern to the Polish Government. This objective can and should be achieved above all by way of arresting the armaments race in this part of the world.

With this in mind the Government of the Polish People's Republic presented some time ago a plan for the creation of a nuclear-free zone in Europe which as is known aroused the interest of numerous states and of world public opinion. In the view of the Polish Government that plan continues to be fully topical.

The Polish Government believes that there are at the present time suitable conditions for undertaking immediate measures the implementation of which could facilitate further steps leading to a détente, to a strengthening of security and to progress in the field of disarmament.

Basing itself on these premises the Government of the Polish People's Republic is submitting a proposal to freeze nuclear and thermonuclear armaments in Central Europe. The implementation of such a proposal would be of particular significance to the security both of Poland and of all countries of this

region as well as of the whole of Europe, since, while in no way affecting the existing relation of forces, it would contribute to the arrest of the nuclear armaments race.

I. The Polish Government proposes that the freezing of nuclear and thermonuclear armaments include in principle the territories of the Polish People's Republic, the Czechoslovak Socialist Republic, the German Democratic Republic and the Federal Republic of Germany, with the respective territorial waters and air space.

The Government of the Polish People's Republic sees the possibility of extending that area through the accession of other European states.

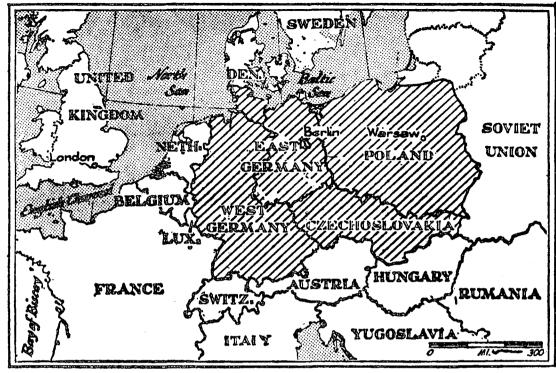
II. The freeze would apply to all kinds of nuclear and thermonuclear charges, irrespective of the means of their employment and delivery.

III. Parties maintaining armed forces in the area of the proposed freeze of armaments would undertake obligations not to produce, not to introduce or import, not to transfer to other parties in the area or to accept from other parties in the area the aforementioned nuclear and thermonuclear weapons.

IV. To ensure the implementation of those obligations an appropriate system of supervision and safeguards should be established.

The supervision over the implementation of the obligation not to produce nuclear and thermonuclear weapons covered by the freeze would be exercised in plants which are or could be used for such production.

To ensure the implementation of other



KEY: The proposed "freeze" zone is shown by the diagonal shading.

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POLAND'S ATOMIC FREEZE PLAN

obligations control would be established to be exercised in accordance with an agreed procedure in proper frontier railway, road, waterway junctions, sea and air ports.

The supervision and control could be exercised by mixed commissions composed of representatives of the Warsaw Pact and of the North Atlantic Treaty on a parity basis. Those commissions could be enlarged to include also representatives of other states. The composition, structure and procedure of the control organs will be the subject of detailed arrangements.

Parties whose armed forces are stationed in the area of the armaments freeze and which have at their disposal nuclear and thermonuclear weapons would exchange at periodical meetings of their representatives all information and reports indispensable for the implementation of the obligations with regard to the freezing of nuclear and thermonuclear armaments.

V. Provisions relating to the implementation of the proposal submitted above should be embodied in appropriate documents.

The Government of the Polish People's Republic is ready to enter into discussions and negotiations with the interested parties to reach an agreement on the implementation of these objectives.

The Polish Government will give due attention to all constructive suggestions which would be in accordance with the objectives of the present proposal and would aim at the freezing of armaments in Central Europe.

The Government of the Polish People's Republic expects a favourable attitude to the proposal submitted hereby.

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REVIEWS OF INTEREST

THE WEST IN A WORLD WITHOUT WAR. By Neil W. Chamberlain. (New York: McGraw-Hill Book Co., 1963. 85 pages, \$2.95.)

The author, a professor of labor economics at Yale, has produced what must be regarded as a stimulating and provocative political pamphlet rather than a scholarly monograph, despite its hard cover and his half-hearted disclaimers of advocacy. He faces squarely the unpleasant, as well as the pleasant, consequences which he says, "logically flow from" nuclear arms control. (This allegation is hortatory rather than descriptive; logic would be strained to demonstrate it.) Facing the choice, he seems to recommend that the United States recognize the direction in which world forces are "inevitably" going, and lead them. The results, he seems to say, will be unpleasant, but less so than the alternative: continuance of the possibility of nuclear armageddon.

To lay groups, this pamphlet provides useful discussion topics and aids to analysis. To scholars, it may suggest topics for fuller analysis and future research.

> C. W. Thumm, Bates College

THE RISE OF THE WEST: A History of the Human Community. By WILLIAM H. McNelll. (Chicago: The University of Chicago Press, 1963. 829 pages, and index, \$12.50.)

In an age of increasing specialization, there are few creative scholars who are willing to undertake fresh syntheses and advance new theories about the nature of human history. The publication of Professor NcNeill's monumental new interpretation of world history is therefore an event to be noted. The Rise of the West rests on the assumption that major social and cultural changes were wrought, in large measure, as a consequence of the

transnational flow and interpenetration of new ideas and innovations.

The book is divided into three major sections. The first section treats the rise of civilization in the Near East, India, and China. It deals with social structure, technological change and economic factors, as well as the more familiar facts of political and military struggles. The second part traces the flowering of Greek civilization, the spread of Hellenism to the Orient, and rise of the barbarian onslaughts, both in Europe and in Asia. The last section concentrates on the rise of the West to global eminence during the seventeenth, eighteenth and nineteenth centuries.

A work of impressive scholarship and imaginative thinking, it is history at its finest: lucid, moving, powerful. author's ideas and interpretations are brilliantly blended into his presentation. The entire narrative moves majestically from period to period, from culture to culture, from crisis to crisis, always retaining the absorbed attention of the reader. Having traversed 5,000 years of recorded history, Professor NcNeill takes his stand in the present with optimism and anticipation of what is yet to come. He writes: "The burden of present uncertainties and the drastic scope of alternative possibilities that have become apparent in our time oppress the minds of many sensitive people. Yet the unexampled plasticity of human affairs should also be exhilarating. Foresight, cautious resolution, sustained courage never before had such opportunities to shape our lives and those of subsequent generations. Good and wise men in all parts of the world have seldom counted for more; for they can hope to bring the facts of life more nearly into accord with the generous ideals proclaimed by all-or almost all-the world's leaders. . . . Men some centuries from now will surely look back upon our time as a golden age of unparalleled technical, intellectual, institutional, and perhaps even of artistic creativity."

A.Z.R.

SIXTY DAYS THAT SHOOK THE WEST. THE FALL OF FRANCE: 1940. By Jacques Benoist-Méchin. Introduction by Cyril Falls. (New York: G. P. Putnam's Sons, 1963. 559 pages, maps and index, \$7.95.)

This is a useful book and an important one. Benoist-Méchin is a well-known military historian and an authority on German military institutions. His prewar History of the German Army could be republished in 1943, under German occupation, without changing a word of his judgments on the Wehrmacht or on the Nazi regime. His present history of the battle of France is likely to endure as an authority in the three volumes of the original French edition for the serious student, or in the present translation for those who want a grandiose, beautifully presented, detailed yet concise panorama of one of the world's great struggles.

For this reason it is well to remember that the author is more than an uncommitted scholar surveying the field from a detached ivory tower. His prejudices are not quite the usual French prejudices. The role of villain Britain plays in his narrative is not allotted solely by justified resentment. The cold and brilliant intelligence of Monsieur Benoist-Méchin has served not only history but also Darlan and Laval. A warm proponent of Franco-German collaboration before 1939, he was able to put his views into practice as Secretary of State for Franco-German affairs under the Vichy regime. Laval would have liked to make him Foreign Secretary, but Pétain opposed him as being too pro-German. He wrote for several violently collaborationist Paris publications, all dedicated to closer relations with the occupant's New Order. He also presided the Tricolor Legion, founded by the Germans to fight Bolshevism on the Eastern Front. Imprisoned at the Liberation, he escaped in time. Now he can again serve the cause of Franco-German friendship which he has so consistently shadowed and which is still ascendant.

Readers of his fascinating work will find these facts relevant in helping them aim off for wind at moments when prejudice may color the presentation or interpretation of events; for instance, when the French version of things is always accepted over that of the British. Here is a book to be read, but with a pinch of salt.

COLE. (New York: G. P. Putnam's Sons, 1963. 314 pages, illustrations, bibliography and index, \$5.95.)

A man who never put anything in writing is not easy to write about, and indeed nothing really good has been written about Laval besides David Thomson's Two Frenchmen: Laval and de Gaulle (London: 1951), a book which Mr. Cole does not cite in his meager bibliography.

And yet Laval's life encompasses the second half of the Third Republic. In this book we see the humble innkeeper's son from Auvergne, rising through study, hard work and savings to success as a lawyer and politician (fourteen times a Minister, three times Prime Minister), beginning on the Left, rallying the Center, ending on the Right. Later in his career, we see the collaborator whose pride convinced him that he alone could save his country, that his poor bargains were the fruit of patriotism, that argument and cunning could prevail against brute force. Then we see Laval's botched judicial murder after the Liberation, a murder that witnessed to the passions he aroused and to the principle of expediency that his successors shared.

Hubert Cole tells his story in undistinguished narrative redeemed by a succession of anecdotes. The effect of this popular biography is the mitigated rehabilitation of a much-abused figure, but no great help for students of history who need to know more about the economic, political and diplomatic problems Laval faced, more too about his attempts to cope with these problems.

Laval still awaits his biographer.

Eugen Weber University of California, Los Angeles

WEAPONS DEVELOPMENT

(Continued from page 70)

to return to something approaching the preeminent position it had once enjoyed as the United States' greatest military arm.

The Polaris, a ballistic missile of intermediate range (possibly 1,800 miles, and going up), has the special virtue of comparative invulnerability, something the Air Force manned bombers can no longer really claim, although the Air Force's own IRBM's and ICBM's will also share this comparative invulnerability. At that point, and assuming that we have not yet solved the problem of the anti-missile missile, the further development of weapons and weapons systems in the United States will surely represent an intense probing for new weapons on a sub-atomic plane. In any case, so long as we have not been able to rid ourselves of war, the long, hard road to the discovery of new weapons, or even new missions for old weapons, will continue.

U. S. MILITARY POSTURE

(Continued from page 76)

lation extremely great, but also in Southeast Asia, where the stakes and with them the dangers of escalation are comparatively low.

This theory has been concisely explained in a book by Glenn Snyder:

The credibility of the threat (in the grey areas) is very low, of course, because the enemy will know our valuation of the areas is not anywhere near commensurate with the costs we would suffer in carrying out the threat. But the enemy may also place little value on these areas. Consequently, only a little credibility may be enough to deter him. He may not want to take even small risks with respect to them, especially since it is generally in these areas that his non-military means of expansion are likely to be most fruitful. If the enemy's valuations are symmetrical with ours, it follows that although the massive retalia-

tion threat is much less credible in Asia than in Europe, it may not be less effective. 17

THE GREY AREAS

In the grey areas perhaps the best military response the United States can have is to develop the capability to move into the area quickly with a military presence sizable enough to prevent a quick take-over and at the same time present the enemy with the threat of escalation to the level of general war, an area of conflict in which United States superiority is still quite significant. Despite differences over the structuring and posture of United States military forces it is difficult to dispute the fact that United States military forces are presently in a better state of readiness than at any time since the end of World War II. At times during this period, our military forces have not been geared adequately to the realities of the existing politico-military environment. This was reflected in a recent article by former Deputy Defense Secretary Roswell Gilpatric when he suggested that our forces in the past were deficient in things such as the necessary modern equipment, immobilized by inadequate airlift capabilities, and that our ground forces were without the required protective air cover.18

That the military posture and strategy of the United States have been brought much more into balance over the past several years is due in large measure to the strenuous and effective efforts of the Kennedy-Johnson administrations in refining our strategic concepts and accelerating the development of United States military capabilities to implement them. Much still remains to be done in both areas, particularly in the Nato region where there still reigns considerable confusion and disagreement over whether Nato strategic concepts and ground force goals are in balance. But in all instances where strategic concepts and military capabilities are still deficient, much thought is being devoted to making the required adjustments.

In sum, the thrust of United States military strategy and force development seems to be moving inexorably in the direction of achiev-

¹⁷ Glenn Snyder, *Deterrence and Defense*, (Princeton: Princeton University Press, 1961), p. 226.

¹⁸ See Roswell Gilpatric, "Our Defense Needs: The Long View," Foreign Affairs, April, 1964, p. 378.

ing the necessary flexibility to enable the United States to take the initiative in the international political arena without great risk of undercutting United States security.

THE NEW MILITARY STRATEGY

(Continued from page 80)

obvious hesitancy about implementing civil defense programs. What reason to build shelters for protection from blast, radiation or fallout, if nuclear war would be on the scale of massive retaliation? Most of humanity would be destroyed either immediately, or over a period of time due to the poisoning of the atmosphere with radioactivity. The very castastrophic and monstrous nature of such a war forestalled any efforts to protect people against it.

With the introduction of the damage limiting, or no-cities doctrine, all of this is changed. Certain types of war may touch parts of the Soviet or United States homelands, but targets will not be primarily population centers. Thus anything done in the way of civil defense, any effort to protect the civilians against nuclear war, will be pure gain. Communities may be encouraged to think about civil defense, and to make studies which would give them some idea of the likelihood of their being a target in case of war. Business firms may ask similar questions. Both might ask whether they are located in or near a vital communication junction which might be used to conduct overseas operations? They might ask if they were near, or part of, a critical defense complex which might be a target? Diversification of industry and of new communities should serve to minimize the damage in limited strategic war.

DISADVANTAGES

These advantages are great, but there are also serious disadvantages. Looking into the future, it may be that the new strategy may actually encourage the outbreak of nuclear war at the same time that it makes it less devastating. It may be that the very horror of a total atomic war, the incomprehensible

prospect of the extermination of mankind, is what has over the last decade and a half prevented an atomic showdown between the United States and the Soviet Union. If both sides accept the conclusion that a general war means the end of everything, its attractiveness to normal people must be low. However, once this element of finality is removed, and both generals and politicians see a way in which a cold war dénouement may be allowed, without implying the end of humanity, to some degree war becomes more possible.

Up until recently, only fools have suggested a thermonuclear solution to our East-West problems. With the new military strategy, people a little less mad may be enlisted into the war hawk camp. Military staffs may be inclined to take greater risks, if they believe each other willing to play the game of damage limitation.

A PERSONAL CHOICE

Which should we prefer, the low probability of a final end to our affairs or the higher probability of a terrible, indecisive, yet less final, event? The question, I think, cannot be answered on objective grounds, but must remain a personal choice.

STEP-BY-STEP DISARMAMENT

(Continued from page 92)

velopment, before the other side advanced still further. Another mutual advantage was implied by President Eisenhower when he said, "Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed."

A proposal of this type is more clearly to the mutual advantage of both sides than previous disarmament proposals, each of which has somehow been slanted in favor of the side proposing it. For this reason, there is a greater chance that the Soviets would accept this than our earlier proposals. Whether they would actually accept it or not cannot be known without trying.

TOTAL DISARMAMENT

(Continued from page 96)

well-equipped teachers. As of 1964, only a good beginning has been made, with a long way to go; and until a much larger proportion of the peoples the world over more clearly understand what is needed, the necessary governmental action cannot be expected.

It is significant that despite the obvious need for effective world law, not a single important head of government has emerged in the past decade as the champion of a comprehensive and adequate plan for peace. Many, indeed, have uttered impeccable generalities as to the need for the rule of law in world affairs. But among the world's statesmen, only former Prime Minister Clement Attlee has persistently called for the definite world institutions upon which enforceable world law must be based.

NEED FOR ENLIGHTENMENT

This dearth of leadership is no accident, for it derives from a lack of pressure from the peoples themselves, which in turn derives from insufficient understanding of the requirements. In short, the price of peace is, I believe, nothing less than far more enlightened electorates in many nations, and, to that end, a far greater effort to educate the peoples as to the basic requirements for a disarmed and ordered world.

United States Ambassador to the United Nations Adlai E. Stevenson said, on March 23, 1964, that since "the sheer arbitrament of force is no longer possible" the world seems to be "groping" for a peace which is "secure in justice and ruled by law." This is doubtless true but it is also true that the world can grope indefinitely for such a peace unless there is sufficient knowledge and clarity of mind to recognize the means whereby alone genuine peace can be achieved. As I have tried briefly to demonstrate, the two indispensable means are on the one hand total, rather than partial, national disarmament and, on the other, an effective system of enforceable world law.

TASK FOR YOUTH

Finally I believe that achievement of this goal is primarily the task of the younger generation, since most older people seem to be too set in their ways to be capable of the new and revolutionary thinking which is required. On this score, Professor Louis B. Sohn and I recently received a letter from a high school senior which gives me hope. She was good enough to commend our book, World Peace through World Law, which is based upon the principles set forth in this article. Then she added: "I, and the millions of others my age, have never known peace, except one of terror. . . . It is a fine feeling to know that clear-thinking still exists, and that there is hope that peace shall some day reign."

Without the hard study and lucid thought revealed by this letter, the search for peace can go on indefinitely without success. But if there are enough young people with the will and ability to study as hard and think as clearly as this girl, they can have genuine peace in their time.

THE CASE FOR . . .

(Continued from page 102)

moronic statesmanship. At least an equal responsibility for delinquency rests upon individuals who act as if they were helpless chess pieces on the playing boards of fate. Effective public opinion can only be created by many millions of individual opinions expressed often enough, clearly enough and insistently enough.

EXCEPTIONAL RESPONSIBILITY

An exceptional degree of responsibility rests upon every American to do all he can to persuade his fellow citizens to help secure official initiative by the United States government toward the yielding of weapons control to an international body by all lands. Leadership by any great power, but especially by the United States, would hasten the coming of a warless world.

THE CASE AGAINST . . .

(Continued from page 106)

representation of what are sizable and apparently irreconcilable blocs with profound differences might serve to cause a centrifugal fracture of the central body. The character of the law which governs any community is a direct function of a moral code. Without a moral consensus, any world order based on some pooling of nuclear forces would necessarily be a superficial and dangerous attempt at community.

WORLD GOVERNMENT

Ignoring for the moment the intrinsic flaws of the proposal, a world nuclear organization must assume the functions of recognized government. It must possess enforceable means of taxation in order to maintain its military police, political and administrative functions. Provisions would have to be made for territorial headquarters of the military establishment, procedures for inspection, organization, communications, recruitment, deployment, codes, transport, logistical integration and standardization, contingency planning, delegation of authority and the numerous other juridical, economic, and military policy decisions. In essence, the proposal for a central nuclear authority is a disguised attempt to build a world government.

CONCLUDING REMARKS

The creation of a world authority of such a far reaching kind would require agreement on basic goals, principles and purposes of government. These are precisely the differences which divide the East and West. Such an organization would appear to be unattainable when needed and unneeded if attainable. Most experts agree that for the foreseeable future comprehensive disarmament is an impossibility given the complex and diverse issues which divide the world.

A worldwide community of interest is the prerequisite for world control. The creation of an international nuclear authority would involve a delegation of sovereignty far more drastic than that which is gradually taking place among the concert of Western European nations in the creation of a politico-economic community. This politically sophisticated, ideologically similar, militarily-threatened group of states have thus far failed to develop a common defense force. To expect the world as a whole to achieve more success than Nato is to ignore all lessons of history and human experience.

DANGER OF CONFUSION

The idea of a peaceful world order, like the goal of complete disarmament, must not be confused with the immediate need to improve the machinery for keeping the peace. There is a danger that by pursuing distant aims too eagerly we may allow the long-term Western ideal of worldwide rule of law to become entangled with current and immediate problems.

The recognition that any verified and complete disarmament will require not only freedom of speech, travel and information, but also a consensus on the fundamental principles of government and international order must not be ignored by an all-consuming desire for one or another suggested plan for "peace."

A ROMANTIC CONCEPT

While the model for a world political system can be drawn, the definition of its substantive foundation will be ephemeral rather than concrete. The picture of a disarmed, centrally governed world is intolerably romantic. The centrifugal effects of ideology, divergent national ambitions and virulent nationalisms would sunder a nuclearly-dictated status quo. Advocacy of a world nuclear force requires more than "good faith." No generation can leap over time. world community awaits a consensus as to the nature of man and agreement as to what constitutes the good society. To seek to place the monopoly of nuclear power in the hands of a world body prematurely would retard rather than advance the cause of "peacewith-justice."

THE MONTH IN REVIEW

A CURRENT HISTORY Chronology covering the most important events of June, 1964, to provide a day-to-day summary of world affairs.

INTERNATIONAL

Berlin

June 10—East and West German delegates confer on establishing an agreement whereby West Berliners can visit their relatives in East Germany.

June 22—Tass (Soviet press agency) reports that in a note to the U.S., the Soviet Union has protested that commercial flights between New York and West Berlin are not lawful unless East Germany consents. A U.S. airline has introduced such flights.

Disarmament

June 8—The 17-nation Geneva disarmament conference reopens after a 5-week recess. The chief of the U.S. delegation, William C. Foster, and the head of the Soviet delegation, Valerian A. Zorin (a Deputy Foreign Minister), address the conference.

June 18—The U.S. and the Soviet Union reach a procedural agreement on the order of discussion of disarmament proposals.

Zorin announces that the Soviet Union will remain flexible on the U.S. proposal of March, 1964, for a "bomber bonfire" of equal numbers of U.S. B-47 bombers and Soviet TU-16 planes.

European Economic Community (Common Market)

June 10—Airline executives and government officials from the 6 Common Market countries reach preliminary agreement on pooling planes and employees; the eventual union of all 6 national airlines into a single system is envisaged.

June 18—The President of the Executive Commission of the Common Market, Walter Hallstein, declares that unless the 6 Common Market countries can agree on a common grain price soon, they will block the Common Market's agricultural policy and the "Kennedy round" of tariff negotiations. The E.E.C. Council of Ministers has postponed establishing a unified grain price.

North Atlantic Treaty Organization (Nato)

June 4—Nato announces that West German Major General Ernst Ferber will head a 4-man strategic planning staff.

United Nations

(See also British Commonwealth, Cyprus)

June 4—The U.N. Security Council unanimously votes to send a 3-man study team to Cambodia and South Vietnam to investigate means of preventing further recurrence of border incidents along the South Vietnamese-Cambodian frontier.

June 6—In Geneva, the U.N. Conference on Trade and Development approves a recommendation that industrialized countries should give no less than approximately 1 per cent of their national incomes in aid to the underdeveloped countries; this would total an estimated \$10 billion annually.

June 10—U.S. Under Secretary of State George W. Ball addresses the U.N. Trade and Development conference.

It is announced that the opening of the 1964 U.N. session has been postponed from September to November 10.

June 14—The U.N. trade conference agrees on an institutional arrangement whereby its work will be continued by a special council meeting biannually and by a small permanent secretariat, both under the U.N. There will also be full meetings of the 120 nations attending the present conference. The conference closes tomorrow.

June 18—The U.N. Security Council votes approval of a resolution to study the application of economic sanctions against the Republic of South Africa; the resolution also condemns South Africa's racist policies.

Western European Union

June 22—W.E.U. President Carlo Schmidt addresses the opening meeting of a 3-day session of the European Assembly.

ALGERIA

(See France and Morocco)

ARGENTINA

June 22—Officials of the state petroleum board occupy the properties of 3 American oil companies.

June 24—It is reported that the Argentine government has assured the 3 U.S. oil companies that it is willing to open formal negotiations shortly.

AUSTRIA

June 23—President Adolf Schärf arrives in West Germany for a 4-day visit.

BELGIUM

June 25—The Government and Belgian doctors sign an agreement for a new health service plan.

BRAZIL

June 15—The institutional act, under which a 60-day period for political purges was authorized, expires. It is reported that a final list of 110 persons, whose political rights have been suspended for 10 years, has been approved.

June 20—Congress approves a bill for a national low-cost housing program.

BRITISH COMMONWEALTH Australia

June 14—Minister for External Affairs Paul M. C. Hasluck, at a news conference, voices support for the U.S. effort in South Vietnam.

Papua-New Guinea

June 8—The House of Assembly, the territory's first legislature with a majority of elected members, opens its first session.

Cyprus

June 5—The White House announces that President Lyndon B. Johnson has invited Turkish Premier Ismet Inonu to Washington to discuss the deteriorating Cyprus situation. Johnson warns Inonu against any drastic measures, such as an invasion of Cyprus. It is reported that Turkey is planning an attack to defend the Turkish minority on Cyprus from the Greek Cypriote majority.

June 10—U.S. Under Secretary of State George W. Ball flies to Athens and Ankara with messages from President Johnson for Greek and Turkish leaders. A spokesman declares that the messages warn Turkey and Greece that the U.S. "is prepared to take certain measures to prevent hostilities between the two countries."

June 13—Reliable sources report that the U.S. has pledged \$2 million, and Great Britain, \$1 million, to defray the costs of maintaining the U.N. peace force in Cyprus for another 3 months.

June 20—The U.N. Security Council unanimously approves a 90-day extension for the peace force in Cyprus until September 26. Secretary-General U Thant appeals to members for financial aid to meet the costs of maintaining the peace force.

June 21—Turkish Premier Inonu arrives in the U.S. for talks with President Johnson. (See also U.S. Foreign Policy.)

June 23—President Johnson and Premier Inonu issue a joint communiqué at the end of 2 days of talks; the communiqué declares that the 2 leaders have discussed the possibility of "negotiation and agreement" and emphasizes the "urgent" need for a permanent settlement of the Cypriote question. The communiqué recognizes the binding effect of present treaties. The Cypriote crisis began when President Makarios attempted to rescind certain con-

stitutional provisions guaranteed by the 1959 accords.

June 25—Greek Premier George Papandreou, at a news conference, declares that Greece is opposed to direct negotiations with Turkey on the Cyprus issue; he upholds the role of "the United Nations mediator" in negotiations and does "not see what services other people could offer."

June 26—Papandreou meets with U.N. Secretary-General U Thant; Papandreou states that Cyprus' problems can be settled only by plebiscite.

June 27—At the United Nations, U.S. representative Adlai Stevenson, U.S. Assistant Secretary of State Harlan Cleveland and U.N. Secretary-General U Thant, among others, confer on the possibility of war over Cyprus.

June 28—General George Grivas, former leader of the Cypriote terrorist activity against Britain, addresses crowds in Cyprus; he urges Greek Cypriotes to wage a life or death battle for a "free Cyprus."

June 29—Reliable sources report that the U.S. has offered to send a special representative to Geneva to meet with Turkish and Greek delegates and the U.N. mediator, Sakari S. Tuomioja. The Geneva talks are scheduled to begin next week.

Great Britain

(See Cuba)

India

June 2—The Congress party unanimously elects Lal Bahadur Shastri as Prime Minister; he succeeds the late Jawaharlal Nehru. June 6—A U.S. Defense Department communiqué announces that the U.S. will give India some \$50 million in military aid and up to \$50 million more in credits for pur-

India some \$50 million in military aid and up to \$50 million more in credits for purchases of U.S. military equipment. The communiqué states that the question of supplying "air-defense aircraft for India" will remain under consideration.

June 9—Shastri announces a 15-man cabinet. The Cabinet is sworn in.

June 27—Fifty-nine year old Shastri is ordered to remain in bed for a few days by his

physicians. It is reported that Shastri has suffered a mild heart attack.

Kenya

June 17—The Government announces that the 2-month prohibition on public meetings is withdrawn.

Malaysia, Federation of

June 15—In Tokyo, delegations from the Philippines, Indonesia and Malaysia confer on withdrawal procedure for Indonesian guerrilla rebels in Sarawak and Sabah (part of the Federation). The opening of the Tokyo conference of Malaysian Prime Minister Abdul Rahman, Philippine President Diosdado Macapagal, and Indonesian President Sukarno is delayed because withdrawal of rebels has not begun.

June 19—Some 32 Indonesian rebels withdraw from Sarawak under the supervision of Thai officials.

June 20—In Tokyo, Prince Abdul Rahman, Sukarno and Macapagal open talks.

June 21—Malaysia announces that the Tokyo talks have collapsed because Indonesia has refused to withdraw its rebels; Malaysia orders British and Malaysian security forces into battle against Indonesian guerrillas.

Nigeria

June 13—A statement is released by government and union leaders announcing that the 13-day general strike for higher wages will end on Monday, June 15; a permanent settlement will then be negotiated.

June 29—Government and labor representatives negotiate a settlement of the strike; government employes will receive a minimum monthly wage of \$28. The Government also agrees to ask parliament to pass a law making the minimum wage binding on other employers.

United Republic of Tanganyika and Zanzibar

June 14—Ethiopian Emperor Haile Selassie arrives in Zanzibar where he is welcomed

by the First Vice-President of the United Republic, Abeid Amani Karume.

BRITISH DEPENDENCIES

British Guiana

June 1—Mrs. Cheddi B. Jagan, Minister of Home Affairs, resigns to protest police failure to act when Negro rioters attacked Indians' homes last week in Wismar. Some 85–90 per cent of the police force is Negro. June 13—Following 4 months of racial violence between Negro and East Indian Guianese, the Governor of British Guiana, Sir Richard Luyt, assumes full emergency powers; Luyt orders some 28 high political and union leaders arrested, including Deputy Premier Brindly Benn and other members of Jagan's People's Progressive party.

Maldive Islands

June 23—British Commonwealth Secretary Duncan Sandys announces that negotiations are in progress to grant independence to the Maldive Islands.

South Arabia, Federation of

June 9—Colonial Secretary Duncan Sandys addresses the opening of a constitutional conference in London; he declares that Britain will continue to help the Federation resist aggression.

June 11—British and Arab troops capture a vital mountain peak from Radfan tribesmen.

Swaziland

June 16—The first stage of the election for a new 28-member Legislative Council begins.

June 27—The results of the election are announced: Paramount Chief Sobhuza II and his supporters win all 12 seats.

CAMBODIA

June 24—Prince Norodom Sihanouk, chief of state, arrives in France where he is welcomed by French President Charles de Gaulle. The 2 leaders discuss the problem of Vietnam and Laos

June 26—The Peking Radio broadcasts an announcement by the press agency of the South Vietnam Liberation Front (the political arm of the Vietcong guerrillas): the Vietcong rebels refuse to recognize or guarantee the safety of the 3-member U.N. mission investigating violations of Cambodia's borders by South Vietnamese. (See also Intl, U.N.)

The 3-member U.N. team arrives in Cambodia

CHINA, PEOPLE'S REPUBLIC OF (Communist)

(See also Laos)

June 1—Yemeni President Abdullah al-Salal arrives in Communist China.

June 21—Hsinhua (Communist Chinese press agency) reports a speech by a Chinese official warning the countries of Asia and Africa that Soviet aid has "strings" attached, and that the U.S.S.R. attempts to dominate recipients of its foreign aid.

CONGO, REPUBLIC OF THE (Leopoldville)

June 2—Congolese troop reinforcements are rushed into Kivu Province because Communist-directed rebels have routed Congolese soldiers.

June 16—The U.S. State Department announces that "American civilian pilots under contract with the Congolese government have flown T-28 sorties in the last few days in the eastern part of the Congo." Previously, the State Department denied that American pilots were helping the Congolese government subdue rebel Bafulero tribesmen.

June 17—The U.S. State Department announces that beginning immediately, U.S. pilots will not participate in combat missions in the Congo.

June 19—It is reported that rebels have seized Albertville, capital of North Katanga Province.

June 22—It is reported that the rebels who

captured Albertville have established a revolutionary government.

June 25—The former President of Katanga Province, Moise Tshombe, leaves Belgium to return to the Congo. It is reported that he has been offered a position in the government.

June 26—Tshombe arrives in the Congo; he confers with top Congolese leaders.

June 27—The former ruler of the secessionist "Mining State" of South Kasai, Chief Albert Kalonji, returns to the Congo after a 2-year exile.

It is rumored that President Jason Sendwe of North Katanga Province has been killed in Albertville by rebel forces.

June 30-Premier Cyrille Adoula resigns. President Joseph Kasavubu asks him to head a caretaker government.

The last U.N. troops leave the Congo. U.N. Secretary-General U Thant tells the Security Council that the outlook for the Congo is not "promising."

CUBA

June 3—A British landing party captures 5 Cubans and 3 other persons preparing for a rebel raid on Cuba at Anguilla Key.

June 4—The 8 persons seized by the British yesterday are tried in court at Nassau in the Bahamas; they are charged with illegal entry and carrying in firearms without permission. The group is fined and placed under the custody of immigration officials. The head of the anti-Castro Cuban Revolutionary Junta, Manuel Ray, is among those seized.

CZECHOSLOVAKIA

June 14—Elections for the Parliament and some 240,000 regional, district and local offices are held. A single list of candidates is offered.

DENMARK

June 21—Soviet Premier Nikita Khrushchev, on a Scandinavian trip, departs for Sweden.

FRANCE

June 5-In France, U.S. Under Secretary of State George W. Ball confers with President Charles de Gaulle on Southeast Asia.

June 6-Receiving the credentials of the first Communist Chinese Ambassador to France, President de Gaulle declares that if peace is to be established on earth, "a power like China" must be "an integral part of it."

June 15—The remaining 2,000 French troops in Algiers leave for home; they will be followed shortly by several hundred French troops in Oran. The troop withdrawal (a year earlier than required) is provided for under the 1962 agreement ending the war in Algeria.

GERMANY, DEMOCRATIC REPUBLIC OF (East)

(See U.S.S.R.)

GERMANY, FEDERAL REPUBLIC OF (West)

June 9-In Canada, West German Chancellor Erhard confers with Canadian Prime Minister Lester B. Pearson.

June 12-West German Chancellor Erhard arrives in the U.S. for talks with U.S. President Johnson.

June 13-Erhard, at a news conference, declares that West Germany will not seek to establish formal diplomatic or trade ties with Communist China for fear of alienating the U.S. (See also U.S. Foreign Policy.)

June 14—On his return to West Germany, Erhard declares that his visit to the U.S. was successful.

June 19—Chancellor Erhard rejects an unofficial Soviet invitation to the U.S.S.R.; he will officially invite Khrushchev to West Germany if the Soviet Premier "sees any objective worth discussing."

HAITI

June 21—The National Assembly proclaims a new constitution which makes President François Duvalier president for life. Earlier this month, the constitution was approved in a national referendum.

INDONESIA

June 22—A Soviet First Deputy Premier, Anastas I. Mikoyan, arrives in Indonesia for talks with President Sukarno.

June 25—At a rally, Mikoyan declares that the Soviet Union is sending modern weapons to help Indonesia in its "just" war with Malaysia. (See also British Commonwealth, Federation of Malaysia.)

IRAN

June 5—Shah Mohammed Riza Pahlevi and Empress Farah Diba, on an unofficial visit to the U.S., are entertained at a White House luncheon by President Johnson.

IRAQ

June 18—Lieutenant General Taher Yahya, Iraqi Premier, forms a new 20-man cabinet.

ISRAEL

June 2—At the end of a 2-day talk in Washington, Israeli Premier Levi Eshkol and U.S. President Johnson issue a joint communiqué providing for U.S.-Israeli cooperative research on using nuclear power to desalt sea water. The communiqué affirms U.S. support for the "political integrity" of all Near Eastern nations.

June 15—Eshkol returns to Israel.

June 28—Premier Eshkol arrives in Paris for talks with French President de Gaulle.

ITALY

June 26—Premier Aldo Moro and his coalition cabinet resign, after defeat by a vote in the Chamber of Deputies on a budget measure providing increased aid to private, mostly church, schools.

KOREA, REPUBLIC OF (South)

June 3—In an antigovernment riot, over 10,000 student demonstrators battle; Seoul police are forced to retreat. Army troops are called in to restore order. President Chung Hee Park invokes martial law in the Seoul area.

June 5—It is revealed that yesterday antigovernment demonstrations demanding the resignation of President Park occurred in Seoul and 8 other Korean cities.

President Park accepts the resignation of the chairman of the ruling Democratic Republican party, Kim Chong Pil, as a conciliatory step to end the rioting.

New antigovernment demonstrations erupt in 12 provincial cities. President Park orders all colleges and universities closed for the rest of the school year (which ends July 4).

June 8—Premier Chong Il Kwon announces that 576 government officials will be dismissed for dishonesty and misbehavior.

June 14—Kim Chong Pil reveals that he will leave the country to visit in the U.S.

LAOS

June 6—The U.S. State Department announces that a U.S. reconnaissance plane was shot down by the pro-Communist Pathet Lao while on a flight mission to observe Pathet Lao troop movements.

June 7—A U.S. navy jet fighter plane is shot down while escorting a reconnaissance plane over the Plaine des Jarres area.

June 8—Sources report that the U.S. has authorized jet fighter plane pilots to defend themselves if fired on.

June 9—The Peking radio broadcasts charges that 6 U.S. jet planes bombed the town of Phongsavang, held by the Pathet Lao.

U.S. sources report that navy jets have attacked a Pathet Lao gun position in north central Laos.

June 10—U.S. officials declare that reconnaissance missions have been suspended for 48 hours.

Jenmin Jih Pao (official Chinese Communist party organ) carries a message warning the U.S. against expanding its war effort in Laos.

June 12—Pro-Communist troops rout neutralist forces at Phou Kont, west of the Plaine des Jarres. Premier Phouma announces that reconnaissance flights will resume.

June 13-In notes to Britain and the Soviet

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Union, Communist Chinese Foreign Minister Chen Yi requests that the 14 nations at the 1962 Geneva conference reconvene to restore peace in Laos. Communist China charges that the U.S. is responsible for the "wanton bombing" on June 11 of a Chinese mission at Khang Khay (political headquarters for the Pathet Lao).

June 15—Jenmin Jih Pao publishes an editorial charging that provocative attacks such as the one on the Chinese mission at Khang Khay will lead to retaliatory measures.

June 16—It is announced that Premier Phouma has invited Prince Souphanouvong, Pathet Lao leader, to meet him in a neutral country to arrange a peace settlement.

June 17—It is disclosed that U.S. T-28 planes used in bombing flights in Laos are flown by Thai and Laotian pilots.

June 18—Laotian planes attack Pathet Lao positions.

Western military sources report that a single Laotian plane was responsible for the bombing of Khang Khay.

June 29—The ambassadors of U.S., Britain, Canada, India, South Vietnam and Thailand urge an immediate ceasefire be called in Laos. With India's ambassador abstaining, the other 5 sign a joint communiqué condemning Pathet Lao attacks and declaring that there is evidence of North Vietnamese assistance to the pro-Communist Pathet Lao. The 6-nation conference began June 2.

June 30—The Polish representative on the International Control Commission for Laos declares that Prince Souphanouvong has agreed to meet with the leaders of the 2 other factions outside Laos.

MOROCCO

June 12—The Moroccan government reveals that Moroccan rebels who crossed the border from Algeria have fought with Moroccan security troops; 4 rebels are killed and 13 captured.

June 13—Two representatives of King Hassan

II confer in Algeria with Algerian President Ahmed Ben Bella over rebel border activity.

NORWAY

June 29—Soviet Premier Khrushchev arrives in Norway.

POLAND

June 15—At the opening session of the fourth congress of the Polish United Workers (Communist) party, First Secretary Wladyslaw Gomulka speaks for over 6 hours criticizing Communist China.

June 20—The Party congress re-elects Gomulka as first secretary.

June 25—Yugoslav President Tito arrives for a 7-day official visit.

RUMANIA

(See also U.S. Foreign Policy)

June 14—In an interview, Deputy Premier Alexandru Birladeanu reveals that over 7,600 political prisoners have been released since 1961 and that a general pardon is scheduled for August.

June 22—At a Rumanian village near the Yugoslav border, Rumanian President Georghe Georghiu-Dej meets with Yugoslav President Tito.

June 24—The Bucharest radio announces that Rumanian workers will receive pay increases of from 10 to 15 per cent; income taxes will be lessened; and family allowances will be increased.

June 25—It is reported that last week Tito notified Rumania that Soviet Premier Khrushchev was annoyed by Rumania's independent policies. Two weeks ago Tito met with Khrushchev in Leningrad.

SOMALIA

June 7—President Aden Abdulla Osman asks Abdirizak Hagi Hussein to become premier and form a new government.

June 14—Premier Hussein's new cabinet is sworn in.

SOUTH AFRICA, REPUBLIC OF

June 2—The nearly 7-month long treason trial of 9 persons ends.

June 11—The Supreme Court convicts 8 of the 9 defendants in the sabotage trial for conspiring against the government of Prime Minister Hendrik F. Verwoerd. Nelson R. Mandela, deputy president of the African Nationalist Congress party (now banned), and Walter M. E. Sisulu, secretary-general of the A.N.C., are among those convicted.

June 12—The 8 defendants are sentenced to life imprisonment.

SWEDEN

June 22—Khrushchev arrives in Sweden and is greeted by Premier Tage Erlander.

TURKEY

June 11—After meeting with visiting U.S. Under Secretary of State George W. Ball, Turkish Premier Ismet Inonu expresses optimism that a solution can be reached on the Turkish-Greek conflict over Cyprus.

U.S.S.R., THE

(See also Germany)

June 4—Pravda (Communist party organ) publishes an article pressing for an international conference of Communist parties to discuss Sino-Soviet differences.

June 8—Soviet Premier Nikita Khrushchev meets with Yugoslav President Tito in Leningrad. Tass (Soviet press agency) issues a communiqué stating that the 2 leaders have discussed the question of Communist unity and of "ending the difficulties" in the world Communist movement.

June 11—It is reported that the Soviet Union yesterday told the U.S. that it will sign a treaty of friendship and mutual assistance with East Germany. The treaty does not end Western rights in Berlin nor preclude the need for a peace treaty with East Germany.

June 12—In the Kremlin, Soviet Premier Nikita Khrushchev and Walter Ulbricht, First Secretary of the East German Socialist Unity (Communist) party, sign a 20-year treaty of friendship, cooperation and mutual assistance. The treaty declares that each country will aid the other in case of attack; it pronounces inviolable East Germany's frontiers. (See also U.S. Foreign Policy.)

June 14—Premier Khrushchev leaves for a 3-week visit to Denmark, Sweden and Norway.

June 26—In a declaration, Britain, France and the U.S. proclaim that the Soviet-East German friendship treaty in no way diminishes the Soviet obligation to honor Western rights in Berlin.

UNITED STATES, THE Civil Rights

(See Segregation & Civil Rights)

Economy

June 5—The Labor Department announces that in May unemployment reached its lowest point in over 4 years, dropping to 5.1 per cent of the labor force.

June 16—In a statement issued by the White House, Johnson proclaims that employment, personal income, and industrial production rose in May; "continued growth" is predicted.

Foreign Policy

(See also Congo, Laos, U.S.S.R. and Vietnam)

June 1—Top-ranking U.S. officials open a conference in Honolulu to discuss Southeast Asian problems.

A joint communiqué is issued at the close of 2 weeks of negotiations between U.S. and Rumanian delegates; it is announced that the U.S. will permit Rumania to purchase many goods in the U.S. without individual export licenses and that licenses for purchases of industrial installations will be granted.

President Johnson welcomes Israeli Premier Levi Eshkol, on the first official visit of an Israeli premier to the U.S. (See also *Israel*.)

June 2—President Johnson, in a news conference, affirms the U.S. commitment to defend Southeast Asia against Communist aggression; he declares that he knows of no plans to expand the war in South Viet-

nam to North Vietnam. The White House announces that U.S. Under Secretary of State George W. Ball will leave shortly for Europe to confer with British and French leaders. (See also *British Commonwealth*, Cyprus, and France.)

June 3—In New London, Connecticut, President Johnson lists the military strength of the U.S. in men and arms and declares that the U.S. is stronger than "any adversary or combination of adversaries."

Later, in Washington, Johnson meets with officials returning from the 2-day meeting in Honolulu to receive their recommendations on Southeast Asian strategy.

June 4—Shah Mohammed Riza Pahlevi of Iran arrives in the U.S.

June 9—Danish Premier Jens Otto Krag arrives in the U.S.; he is honored at a White House dinner dance.

June 12—Johnson and visiting West German Chancellor Ludwig Erhard confer; a joint communiqué is issued in which the 2 leaders agree that "a just and peaceful solution to the problem of Germany and Berlin" must be found; they support German unification "through self-determination." The communiqué notes that the Soviet Union and East Germany have signed a mutual aid agreement but emphasizes that "no [Soviet] unilateral move" can infringe on Allied rights in Berlin and Germany.

June 21—Turkish Premier Ismet Inonu arrives in the U.S. to discuss the Cyprus conflict with President Johnson. (See also *British Commonwealth*, Cyprus.)

June 22—The U.S. State Department announces that the U.S. is determined to help Vietnam repel Communist aggression. Sources report that Communist leaders are aware of the U.S. commitment in Southeast Asia.

June 23—The resignation of Ambassador to South Vietnam Henry Cabot Lodge is accepted by Johnson. (See also *U.S. Government.*)

President Johnson announces that the U.S. and the Soviet Union will study the possibilities for "effective scientific cooperation" in finding means to desalt sea water.

June 24—President Johnson confers in Washington with Greek Premier George Papandreou to try to avert a war over Cyprus.

June 28—Speaking in Minneapolis to over 50,000 people at a Swedes' Day picnic, President Johnson declares that the U.S. will firmly oppose Communist aggression and will "risk war" if necessary to fight "dominion or conquest."

June 29—Henry Cabot Lodge returns to the U.S. and reports to President Johnson. Lodge declares that the anti-Communist campaign in South Vietnam can be stepped up without expanding the war.

Government

June 3—Some 121 high school graduates are named Presidential Scholars of 1964 by President Johnson.

June 8—Johnson states that government does not threaten individual liberty but frees the individual "from the enslaving forces of his environment," in a commencement address at Swarthmore College.

June 10—By a vote of 71 to 29, the Senate invokes cloture to cut off debate on the civil rights bill.

June 19—The Senate approves, by a vote of 73-27, the civil rights bill prohibiting racial discrimination in employment, voter registration, and public accommodations such as hotels, restaurants, gas stations and places of amusement. To speed desegregation, the Attorney General is empowered to file suit in areas with a "pattern" of discrimination. The Senate bill (a revised version of the House bill passed in February) now goes back to the House for approval.

June 22—The Senate approves a \$2.6 billion authorization for the A.E.C. for the fiscal year beginning July 1. The bill, passed earlier by the House, is sent to the White House.

June 23—General Maxwell D. Taylor is named Ambassador to South Vietnam, replacing Henry Cabot Lodge. Johnson names U. Alexis Johnson to the special post of Deputy Ambassador to South Vietnam. General Earle G. Wheeler, Army Chief of Staff, is named to replace Taylor as chairman of the Joint Chiefs of Staff.

June 24—President Johnson names Lieutenant General Harold E. Johnson as Army Chief of Staff.

The Federal Trade Commission announces that effective January 1, 1965, all cigarette containers will have to carry a printed warning that smoking "may cause death from cancer and other diseases."

June 26—The Senate passes a bill increasing the ceiling on the national debt to \$324 billion; the bill, passed by the House previously, is sent to the President for signing. June 29—President Johnson swears in Dr. Mary I. Bunting as a member of the Atomic Energy Commission. Mrs. Bunting, president of Radcliffe College, is the first woman

President Johnson signs the bill to increase the temporary ceiling on the national debt to \$324 billion.

June 30—The Senate approves a bill for \$375 million in grants over a 3-year period to improve commuter bus, subway and train service in large cities. The House passed the bill last week. It goes to the White House.

The bill to extend the Korean War excise taxes for the year beginning July 1, 1964, is sent to the President.

Labor

member.

June 8—President of the A.F.L.-C.I.O. George Meany tells 90 union leaders that unions must help pressure employers to give up discriminatory hiring practices; the union leaders are attending a conference sponsored by the Labor Advisory Council to the President's Committee on Equal Employment Opportunity.

June 14—The United Steelworkers of America and 11 steel companies sign an agreement to support equal employment opportunities.

Military

(See also Government)

June 12—The White House announces that the military assistance commander in South

Vietnam, General Paul D. Harkins, will return to the U.S. in 10 days; he will be replaced by Lieutenant General William C. Westmoreland.

June 20—General Paul D. Harkins leaves South Vietnam.

June 21—It is reported that Secretary of Defense Robert McNamara has approved a \$1 million study of the military draft program.

Politics

June 3—Complete returns from the Republican presidential primary in California are reported: Arizona Senator Barry Goldwater received 1,089,133 votes; N.Y. Governor Nelson Rockefeller received 1,030,-180 votes. Goldwater's victory assures him of California's 86 votes at the Republican National Convention.

June 6—Pennsylvania Governor William Scranton (Republican) confers with former President Dwight D. Eisenhower for 85 minutes; Scranton agrees to Eisenhower's request that he accept the Republican presidential nomination if asked by a majority of convention delegates.

June 7—Alabama Governor George C. Wallace announces that he will run for the presidency as an "Alabama Democrat" in every state where his name can be listed legally on the ballot.

June 8—It is reported that yesterday Eisenhower telephoned Governor Scranton at the National Governors Conference in Cleveland to declare that he did not wish to be part of a "cabal" to "stop Goldwater."

June 11—Eisenhower declares that he would have difficulty supporting Goldwater for President because of the Senator's civil rights stand.

June 12—Governor William Scranton addresses the Maryland State Republican Convention and proclaims he is a candidate for the presidency.

The committee to draft Ambassador Henry Cabot Lodge for the Republican presidential nomination swings its support to Scranton.

June 15—Governor Rockefeller announces

- that he is withdrawing from the Republican race in favor of Scranton.
- June 16—According to an Associated Press poll of delegates to the Republican Convention, Senator Goldwater has enough votes to win the nomination.
- June 18—Returning from a trip to explain his views to Dwight Eisenhower, Goldwater, in a Senate speech, announces that he will not vote for the civil rights bill.

Milton Eisenhower, president of the Johns Hopkins University, offers his "full support" to Scranton in a letter released today.

- June 20—In Los Angeles, Johnson addresses a Democratic dinner.
- June 23—Attorney General Robert Kennedy announces that he will not run for the Democratic Senatorial nomination in New York.

A statement by resigning Ambassador to South Vietnam Henry Cabot Lodge declares that he has resigned to help William Scranton in his fight for the Republican presidential nomination.

- June 27—The N.A.A.C.P. annual convention adopts a resolution urging the Republican National Convention to deny the presidential nomination to Senator Barry Goldwater.
- June 30—Henry Cabot Lodge confers with Dwight D. Eisenhower for 45 minutes.

Segregation and Civil Rights

- June 5—Dr. Martin Luther King describes St. Augustine, Florida, as the most "lawless" community in which he has ever worked.
- June 11—Following a federal court order yesterday, Cleveland Donald Jr. enrolls at the University of Mississippi without incident.

Martin Luther King and 17 others are arrested when they attempt to enter a segregated restaurant in St. Augustine.

- June 15—Some 1,200 persons from New York travel to Washington, D.C., to fulfill a pledge to keep returning until Congress passes the civil rights bill.
- June 17—A U.S. district judge orders Prince Edward County (Va.) to reopen its public

- schools by June 25, in accordance with a ruling by the Supreme Court last month.
- June 18—Rodman Rockefeller and Harvey C. Russell, Vice-President of the Pepsi-Cola Company, announce the creation of an Interracial Council for Business Opportunity to help Negro businessmen and Negroes wishing to open businesses.
- June 20—Florida Governor Farris Bryant, acting under emergency police powers, prohibits night demonstrations on public property. In St. Augustine segregationists attack Negroes and whites swimming at a public beach.
- June 21—Some 200 civil rights volunteers, the first of a 1,000-man force, arrive in Mississippi to carry on a massive Negro voter registration campaign, and conduct freedom schools and community centers.
- June 22—A federal judge orders Governor Bryant to show cause why he should not be held in contempt for banning night demonstrations.

In St. Augustine, white gangs attack integrated bathers at a public beach.

June 23—A charred 1964 station wagon is found in a swamp 15 miles northeast of Philadelphia, Mississippi. The 3 occupants, participants in the civil rights drive in Mississippi, are missing.

The White House announces that President Johnson is sending Allen Dulles, former director of the Central Intelligence Agency, to Mississippi, to help locate the 3 missing young men. A full-scale investigation by the Federal Bureau of Investigation is under way.

The Prince Edward County Board of Supervisors votes to reopen public schools. June 24—Attorney General Kennedy tells officials of the National Association for the Advancement of Colored People that the federal government cannot take "preventive" police action in Mississippi. He declares that F.B.I. forces in Mississippi have been strengthened.

June 25—It is announced that 200 unarmed sailors have been ordered to Missisippi by President Johnson to help in the search for the missing civil rights workers.

In St. Augustine, some 800 whites riot and attack a parade of several hundred Negroes.

June 26—Meeting with President Johnson on his trip to Mississippi, Dulles recommends that more F.B.I. agents be sent to Mississippi to keep order.

Law enforcement officials in St. Augustine tell a federal judge that they are not able to prevent white attacks against Negroes. Governor Bryant fails to show up for a hearing on the ban he imposed on demonstrations after dark; he sends a representative.

June 28—Some 300 more civil rights volunteers arrive in Mississippi.

June 30—It is announced that Florida Governor Bryant has named an emergency committee to help restore Negro-white "communications" in St. Augustine.

Supreme Court

June 1—The Supreme Court remands to the Alabama Supreme Court its decision that the activities of the N.A.A.C.P. (National Association for the Advancement of Colored People) in Alabama are not unconstitutional, and asks that the injunction against N.A.A.C.P. operations in Alabama be rescinded.

June 8—The Supreme Court refuses to review a December, 1963, U.S. Court of Appeals decision reversing the conviction of the Communist party for failing to register under the Internal Security Act of 1950. The Court of Appeals declared that any individual registering for the Party risks self-incrimination; there might be an individual willing to register for the Party, but the burden of proof that such a "volunteer" exists rests with the Government.

June 15—In a 5-4 decision, the Supreme Court rules that the Fifth Amendment's prohibition against self-incrimination applies in state as well as federal proceedings.

The Supreme Court rules that testimony, given by a witness who has been forced to testify by a state under a grant of immunity, may not be used in federal proceedings.

In a 6-3 ruling, the Supreme Court declares that the apportionment of both houses of a state legislature must be based on equal population, i.e., "one man, one vote."

June 22—The Supreme Court, in a 6-3 decision, rules that members of the Communist party or front organizations may not be denied passports to travel abroad under the Internal Security Act and that such travel restrictions are not constitutional.

VATICAN, THE

June 23—Pope Paul VI announces that the Roman Catholic Church is conducting a "profound" study of birth control and hopes it "will soon be concluded."

VIETNAM, SOUTH

June 5—U.S. Under Secretary of State George W. Ball confers in Paris with President de Gaulle on South Vietnam. It is disclosed that the 2 men are unable to resolve differences over the way in which the South Vietnamese war should be settled.

June 7—It is reported that pro-Communist Vietcong guerrillas have surrounded a 600square-mile area south of Camau and are blocking all food and water supplies to the area.

June 8—The Australian Minister of Defense announces that Australia will send 6 planes to South Vietnam; Australian army instructors will serve in the field as advisers to Vietnamese forces.

June 27—At Long Hoi, a village south of Saigon, South Vietnamese Ranger troops defeat 2 companies belonging to a Vietcong battalion. Two U.S. crewmen and 1 Vietnamese are killed when their helicopter is shot down.

YUGOSLAVIA

(See also Poland and Rumania).

June 1—President Tito begins a state visit to Finland.

June 9—Tito returns to Yugoslavia after a meeting with Soviet Premier Khrushchev in Leningrad.

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